A 8630-2

Annual Data Summary Report
for the Regional Reliability Councils
of NERC

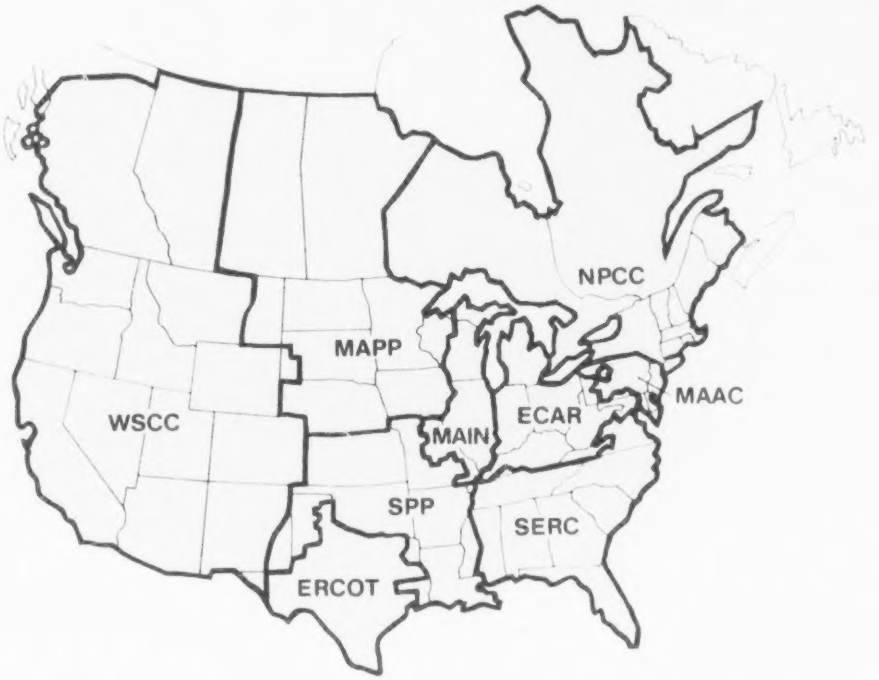
Electric Power Supply & Demand

1983-1992

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Research Park, Terhune Road • Princeton, NJ 08540 • (609) 924-6050

North American Electric Reliability Council



ECAR	East Central Area Reliability Coordination Agreement
ERCOT	Electric Reliability Council of Texas
MAAC	Mid-Atlantic Area Council
MAIN	Mid-America Interpool Network
MAPP	Mid-continent Area Power Pool
NPCC	Northeast Power Coordinating Council
SERC	Southeastern Electric Reliability Council
SPP	Southwest Power Pool
WSCC	Western Systems Coordinating Council

AFFILIATE

ASCC	Alaska Systems Coordinating Council

The North American Electric Reliability Council (NERC) was formed by the electric utility industry in 1968 to promote the RELIABILITY and ADEQUACY of bulk power supply in the electric utility systems of North America. NERC consists of nine regional reliability councils and one affiliate encompassing virtually all of the power systems in the United States and Canada.

RELIABILITY and ADEQUACY are separate but interdependent aspects of the bulk power supply system of the electric utility industry in North America. RELIABILITY involves the security of the interconnected transmission network and the avoidance of uncontrolled cascading tripouts that may result in widespread power interruptions. ADEQUACY refers to having sufficient generating capability to meet the electric demands of all customers.

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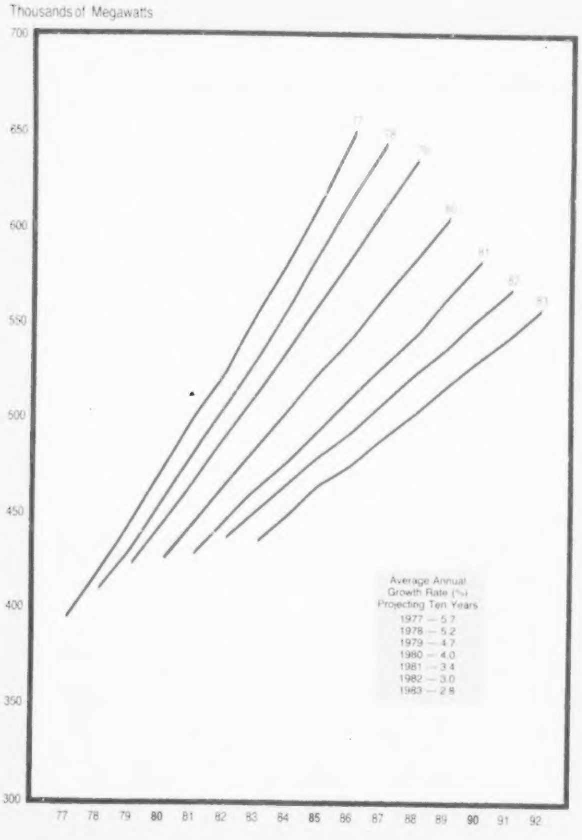
Highlights

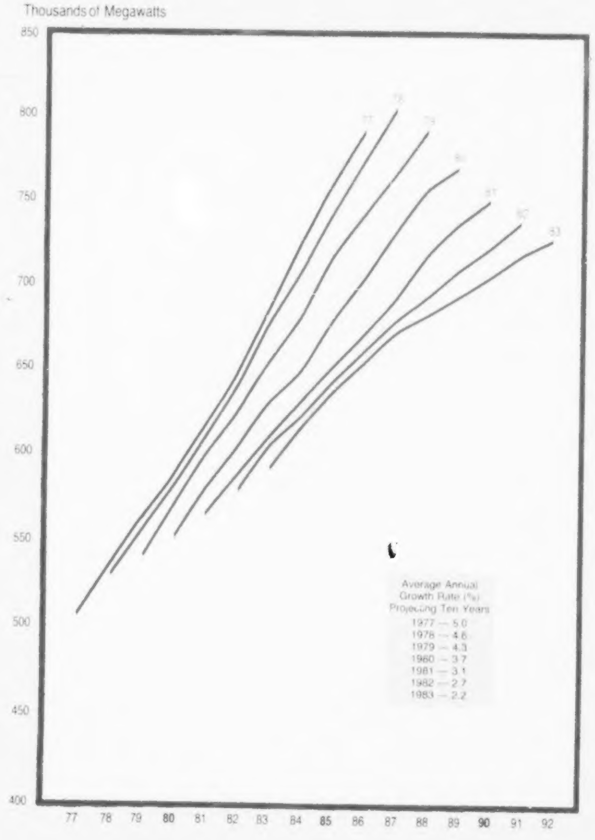
U.S.	1983	1992	1983-1992
Projected Summer Peak Demand (MW)	436,228	558,241	—
Summer/Winter Peak Demand Ratios	108.3%	107.1%	—
Summer Peak Demand Average Annual Growth Rate	—	—	2.8%
Net Electrical Energy Requirements (10^6 kWh)	2,351,417	3,123,464	—
Annual Load Factors	61.5%	63.9%	—
Net Energy Average Annual Growth Rate	—	—	3.2%
Scheduled New Coal-Fired Generating Units	—	—	129 (66.8GW)
Scheduled New Nuclear Generating Units	—	—	60 (65.4GW)
Scheduled Oil-To-Coal Unit Conversions	—	—	48 (8.5GW)

Projected ten-year demand growth continues to slow. Capacity expansion plans for the period follow . . .

NERC Summer Peak Demand Projections
Comparison of Annual Ten-Year Forecasts
(U.S.)



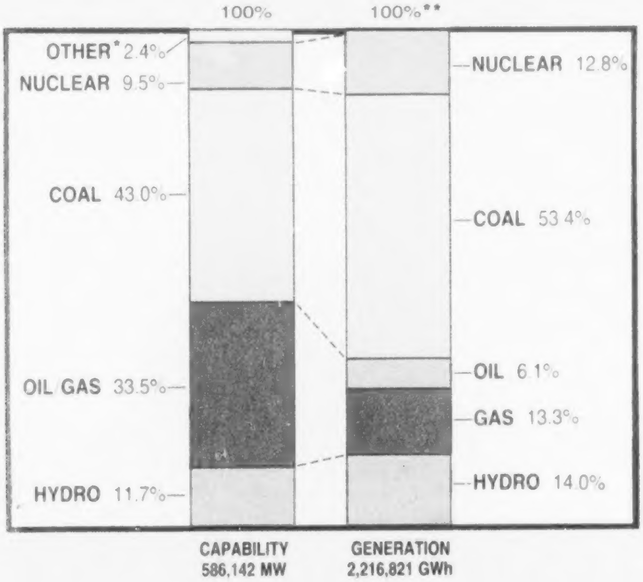
NERC Summer Planned Resources
Comparison of Annual Ten-Year Forecasts
(U.S.)



CANADA	1983	1992	1983-1992
Projected Winter Peak Demand (MW)	55,520	76,035	—
Summer/Winter Peak Demand Ratios	70.5%	69.3%	—
Winter Peak Demand Average Annual Growth Rate	—	—	3.6%
Net Electrical Energy Requirements (10⁶ kWh)	303,382	421,975	—
Annual Load Factors	67.1%	65.2%	—
Net Energy Average Annual Growth Rate	—	—	3.7%
Scheduled New Coal-Fired Generating Units	—	—	14 (4.7GW)
Scheduled New Nuclear Generating Units	—	—	13 (9.3GW)
Scheduled Oil-To-Coal Unit Conversions	—	—	0

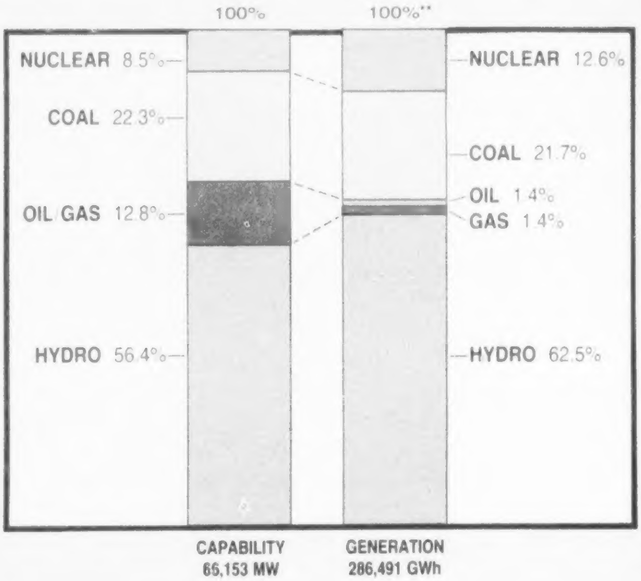
NERC

1982 Actual Capability vs. Generation
(U.S.)



NERC

1982 Actual Capability vs. Generation
(Canada)



*OTHER includes pumped storage capacity. The net negative generation from pumped storage results in reducing generation from OTHER to 0.4%.

**The difference between the sum of the parts and 100% represents the share by sources not shown, including net pumped storage requirements.

Introduction

ABOUT NERC

The North American Electric Reliability Council (NERC) was formed by the electric utility industry in 1968 to promote the reliability and adequacy of bulk electric power supply in North America.

NERC's nine regional reliability councils and one affiliate comprise virtually all of the electric utility systems in the United States and Canada. The regional identifications and geographic boundaries are shown on the map inside the front cover.

The governing body of NERC is its Board of Trustees, consisting of two representatives from each regional council, plus such additional representatives as prescribed in the By-Laws. There must always be at least one representative on the Board from a Canadian utility system and at least two utility representatives from each segment of the electric utility industry: Investor-owned, Federal, Rural Electric Cooperative, and State/Municipal.

Meetings of the Board are attended by observers from the United States Department of Energy and from the Canadian National Energy Board. Representatives of the Edison Electric Institute, American Public Power Association and the National Rural Electric Cooperative Association also attend as observers.

NERC was created with an active committee structure, spanning the existing regional utility organizations, providing an industry forum and mechanism for coordination. NERC committee members are chief executive officers and high-level technical personnel from all segments of the industry, dedicated to this objective. This committee structure, requiring the active cooperation of hundreds in the industry, is coordinated and supported by the NERC staff located in Princeton, New Jersey.

ABOUT THIS REPORT

One of the major activities of NERC is the annual compilation and publication of utility forecasts relating to electric power supply and demand. This *Electric Power Supply and Demand* report has been designed to provide these data in a concise and useful format to satisfy the needs of a wide variety of industry audiences.

The projections summarized in this report are not constructions of NERC, but rather are aggregations of the projections developed early in 1983 by the individual utility members of each regional reliability council.

The data on projected peak demand and planned resources for 1983-1992, and on planned additions of generating units, have been extracted from the April 1, 1983 Coordinated Bulk Power Supply Program (EP-411) reports submitted to the United States Department of Energy (DOE) by each of the nine regional reliability councils.

The data on 1982-1992 generating capability, net electric energy generation, fossil fuel requirements, planned conversions of units to coal-firing, planned additions of transmission lines, and 1982 actual peak demand are reported directly to NERC by the regional reliability councils.

Derivations of data compiled in the other tables of this report are described where necessary in the text accompanying each table.

It is to be understood that this report is intended to provide projections, not predictions, at a given point in time. Uncertainties exist. Changing circumstances may vitiate certain assumptions underlying these projections. The most consequential of these uncertainties are:

1. Unanticipated factors affecting future growth of peak demand and energy requirements.
2. The uncertainties associated with the schedules of generating units presently under construction or planned for the future.
3. Unanticipated regulatory restrictions which may affect the operation of existing generating units.
4. Future constraints on fuel availability or use beyond those recognized at the time the projections were prepared.

The unique value of the NERC summary of projections is that it reflects the collective perceptions and plans of the individual utilities who are in the best position at any one time to understand the particular conditions and trends affecting the requirements of their customers.

The data found in the tables of this report have been summarized by NERC regions. Data for the MAIN, NPCC, SERC, SPP, and WSCC regions are also sorted by their subregions and presented in subregional tables following each corresponding regional table. The following subregional abbreviations have been used throughout:

MAIN

Cmnwlth Ed.—Commonwealth Edison Company
E. Missouri—East Missouri Group
So. Cent. Ill.—South Central Illinois Group
WUM—Wisconsin-Upper Michigan Systems Group

NPCC

New York—New York State
New England—New England
New Brunswick—New Brunswick Electric Power Commission
Ontario—Ontario Hydro
Québec—Hydro-Québec

SERC

Florida—Florida Subregion
Southern—Southern Subregion
TVA—Tennessee Valley Authority Subregion
VACAR—Virginia-Carolinas Subregion

SPP

Group A—West Arkansas-Lousiana-Mississippi Area
Group B—Oklahoma Area
Group C—West Missouri-Kansas Area

WSCC

NWPP—Northwest Power Pool Area
RMPA—Rocky Mountain Power Area
AZ-NM—Arizona-New Mexico Power Area
CA-SNV—California-Southern Nevada Power Area

Throughout this data report, reference to the U.S. refers to the *contiguous* United States; reference to Canada refers to the seven provinces bordering the contiguous U.S. Where seasons are designated, SUMMER is defined as that period of the year between June 1 and September 30; WINTER is defined as that period between December 1 and March 31. Appropriate footnotes have been included.

Projected Peak Demand

Projected Peak Demand data represent actual and forecast peak hour demands, less demands which are interruptible by contract.

Peak demands as tabulated for the various NERC regions may occur in different months within a given season. NERC totals, therefore, represent aggregations of non-coincident regional peak demands.

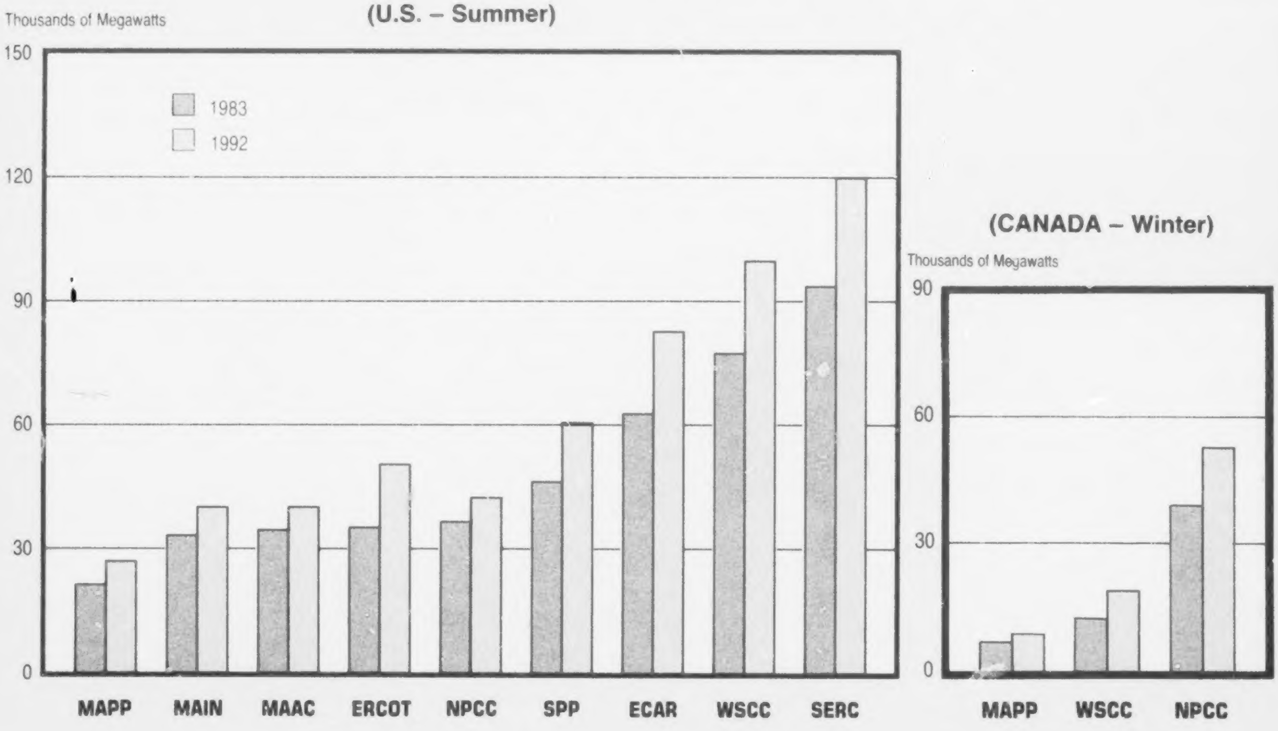
U.S. utilities are forecasting summer peak demands for 1983-1992 which, in the aggregate, result in an average annual growth rate of 2.8%. Last year's ten-year forecast rate was 3.0%

This decline of 0.2% in the average annual growth rate, combined with the fact that this year's prediction for 1983 (436,228 MW) is actually less than last year's prediction for 1982 (438,086 MW), results in almost a two-year slippage in projected peak demand for the U.S. by the 10th year. That is, this year's projection for 1992 (558,241 MW) approximates last year's projection for 1990 (553,931 MW).

Canadian utilities are forecasting winter peak demands for 1983-1992 which result in an average annual growth rate of 3.6%. Last year's ten-year forecast rate was 4.8%.

This decline of 1.2% in the average annual growth rate for Canada, combined with the fact that this year's prediction for the 1983/84 winter (55,520 MW) is actually slightly less than last year's prediction for 1982/83 (55,970 MW) results in almost a four-year slippage in projected peak demand by the 10th year. This year's projection for the 1992/93 winter (76,035 MW) approximates last year's projection for 1988/89 (75,597 MW).

NERC Projected Peak Demands



Summer (MW)

Regional Table 1

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	59,668	62,170	64,570	68,360	70,257	72,160	74,440	76,541	78,314	80,180	82,076
ERCOT	33,231	34,695	36,231	37,592	39,094	40,616	42,448	44,329	46,210	47,992	49,960
MAAC	33,846	34,080	34,730	35,340	35,890	36,440	37,110	37,800	38,450	39,050	39,630
MAIN	31,394	32,773	33,741	34,707	35,410	36,104	36,794	37,516	38,186	38,922	39,627
MAPP – U.S.	19,470	20,893	21,496	22,409	22,993	23,567	24,139	24,689	25,321	25,870	26,520
NPCC – U.S.	36,427	36,065	36,825	37,385	37,755	38,355	39,075	39,825	40,475	41,185	41,905
SERC	86,229	93,048	95,106	98,237	100,657	103,881	106,845	109,792	112,962	116,414	119,331
SPP	43,064	45,733	47,487	49,179	50,680	52,216	53,748	55,350	56,831	58,335	59,999
WSCC – U.S.	71,580	76,771	80,114	82,373	84,601	87,446	90,057	92,548	94,758	96,957	99,193
NERC – U.S.	414,909	436,226	450,300	465,582	477,337	490,785	504,656	518,390	531,507	544,905	558,241
MAPP – CANADA	3,146	3,425	3,635	3,856	4,096	4,237	4,416	4,556	4,731	4,869	5,000
NPCC – CANADA	26,395	26,738	27,835	28,995	29,926	30,715	31,231	31,928	32,579	33,408	34,029
WSCC – CANADA	8,012	8,960	9,632	10,188	10,849	11,313	11,745	12,219	12,711	13,245	13,700
NERC – CANADA	37,553	39,123	41,102	43,039	44,871	46,265	47,392	48,703	50,021	51,522	52,729

Summer (MW)

Subregional Table 1

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	13,072	13,550	14,100	14,650	14,950	15,250	15,550	15,850	16,150	16,500	16,850
EAST MISSOURI	5,902	6,051	6,114	6,175	6,267	6,349	6,421	6,501	6,583	6,664	6,756
SO. CENT. ILL.	6,241	6,568	6,742	6,955	7,141	7,322	7,494	7,683	7,857	8,047	8,220
WUM	6,179	6,604	6,785	6,927	7,052	7,183	7,329	7,482	7,596	7,711	7,801
MAIN	31,394	32,773	33,741	34,707	35,410	36,104	36,794	37,516	38,186	38,922	39,627
NEW YORK	21,027	20,915	21,145	21,485	21,815	22,135	22,495	22,825	23,095	23,385	23,705
NEW ENGLAND	15,400	15,150	15,680	15,900	15,940	16,220	16,580	17,000	17,380	17,800	18,200
NPCC – U.S.	36,427	36,065	36,825	37,385	37,755	38,355	39,075	39,825	40,475	41,185	41,905
NEW BRUNSWICK	1,053	1,162	1,231	1,265	1,296	1,329	1,361	1,392	1,425	1,457	1,490
ONTARIO	13,832	14,041	14,504	15,052	15,319	15,644	15,816	16,007	16,212	16,523	16,714
QUÉBEC	11,510	11,535	12,100	12,678	13,311	13,742	14,054	14,529	14,942	15,428	15,825
NPCC – CANADA	26,395	26,738	27,835	28,995	29,926	30,715	31,231	31,928	32,579	33,408	34,029
FLORIDA	17,907	19,431	19,948	20,546	21,146	21,611	22,081	22,487	23,105	23,957	24,657
SOUTHERN	21,021	22,131	22,732	23,360	23,927	24,636	25,282	26,114	26,947	27,749	28,504
TVA	18,412	20,650	20,708	21,522	22,124	23,293	24,140	24,838	25,587	26,250	26,894
VACAR	28,889	30,836	31,718	32,809	33,460	34,341	35,342	36,353	37,323	38,458	39,276
SERC	86,229	93,048	95,106	98,237	100,657	103,881	106,845	109,792	112,962	116,414	119,331
GROUP A	18,812	19,787	20,517	21,349	21,998	22,654	23,270	23,957	24,515	25,146	25,843
GROUP B	14,009	15,110	15,797	16,360	16,912	17,489	18,090	18,685	19,291	19,860	20,438
GROUP C	10,243	10,836	11,173	11,470	11,770	12,073	12,388	12,708	13,025	13,329	13,718
SPP	43,064	45,733	47,487	49,179	50,680	52,216	53,748	55,350	56,831	58,335	59,999
NWPP – U.S.	23,507	23,731	25,657	26,535	27,419	28,583	29,450	30,190	30,930	31,669	32,327
RMPA	5,370	5,596	5,848	6,109	6,491	6,777	7,146	7,475	7,753	8,024	8,317
AZ-NM	8,707	9,416	9,929	10,508	10,912	11,423	11,973	12,510	12,996	13,503	13,982
CA-SNV	35,753	38,408	38,860	39,252	39,779	40,847	41,682	42,579	43,297	44,040	44,816
WSCC – U.S.*	71,580	76,771	80,114	82,373	84,601	87,446	90,057	92,548	94,758	96,957	99,193

Winter (MW)

Regional Table 2

REGION	ACTUAL 1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
ECAR	56,559	62,992	67,129	69,249	71,159	73,511	75,893	77,875	79,870	81,921	83,999
ERCOT	25,347	26,558	27,792	28,591	29,834	31,264	32,823	34,479	36,025	37,617	39,272
MAAC	28,197	30,260	30,980	31,680	32,580	33,490	34,390	35,270	36,090	36,620	37,570
MAIN	24,303	27,499	28,249	29,105	29,886	30,700	31,549	32,339	33,176	34,011	34,814
MAPP – U.S.	17,816	18,255	18,775	19,732	20,145	20,565	21,033	21,498	22,003	22,561	23,212
NPCC – U.S.	34,755	35,255	36,105	36,585	36,925	37,465	38,265	39,065	39,825	40,665	41,485
SERC	85,664	92,662	95,469	97,860	100,940	104,152	106,825	109,827	113,265	116,435	119,253
SPP	32,743	34,602	36,014	37,316	38,488	39,739	40,990	42,222	43,548	44,915	46,294
WSCC – U.S.	67,934	74,880	77,823	79,981	82,952	85,912	88,323	90,810	92,973	95,097	95,473
NERC – U.S.	373,318	402,963	418,336	430,099	442,909	456,798	470,091	483,385	496,775	510,102	521,372
MAPP – CANADA	4,507	4,783	5,092	5,400	5,656	5,901	6,106	6,320	6,543	6,730	6,910
NPCC – CANADA	36,997	38,898	40,693	42,468	43,847	45,199	46,413	47,686	48,876	50,110	51,457
WSCC – CANADA	10,123	11,839	12,640	13,307	14,110	14,700	15,246	15,808	16,394	17,083	17,668
NERC – CANADA	51,627	55,520	58,425	61,175	63,613	65,800	67,765	69,814	71,813	73,923	76,035

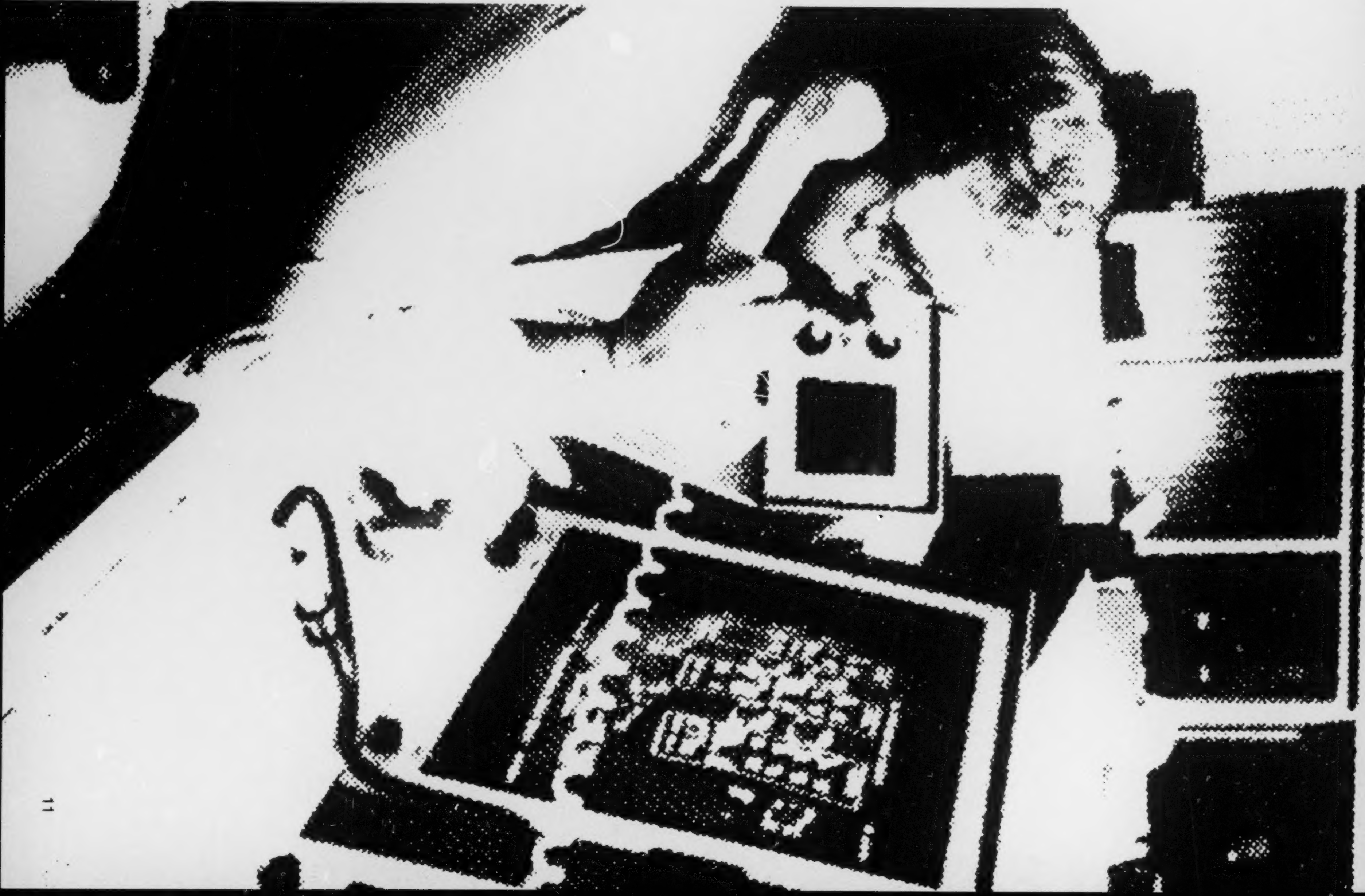
Winter (MW)

Subregional Table 2

SUBREGION	ACTUAL 1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
CMNWLTH ED.	9,981	10,970	11,190	11,420	11,650	11,880	12,120	12,370	12,620	12,880	13,140
EAST MISSOURI	3,973	4,477	4,649	4,841	5,033	5,235	5,447	5,649	5,861	6,084	6,286
SO. CENT. ILL.	4,574	5,665	5,890	6,163	6,375	6,593	6,809	6,987	7,220	7,426	7,632
WUM	5,775	6,387	6,520	6,681	6,828	6,992	7,173	7,333	7,475	7,621	7,756
MAIN	24,303	27,499	28,249	29,105	29,886	30,700	31,549	32,339	33,176	34,011	34,814
NEW YORK	19,135	19,175	19,575	19,915	20,265	20,615	21,075	21,425	21,755	22,115	22,455
NEW ENGLAND	15,620	16,080	16,530	16,670	16,660	16,850	17,190	17,640	18,070	18,550	19,030
NPCC – U.S.	34,755	35,255	36,105	36,585	36,925	37,465	38,265	39,065	39,825	40,665	41,485
NEW BRUNSWICK	1,435	1,554	1,690	1,740	1,796	1,850	1,904	1,957	2,008	2,060	2,112
ONTARIO	17,253	17,541	18,213	18,651	19,044	19,430	19,664	19,920	20,183	20,502	20,954
QUÉBEC	18,309	19,803	20,790	22,077	23,007	23,919	24,845	25,809	26,685	27,548	28,391
NPCC – CANADA	36,997	38,898	40,693	42,468	43,847	45,199	46,413	47,686	48,876	50,110	51,457
FLORIDA	21,222	22,169	22,925	23,374	23,883	24,465	24,804	25,306	26,201	26,984	27,617
SOUTHERN	17,243	18,576	19,051	19,634	20,327	21,349	22,212	23,123	23,960	24,816	25,651
TVA	18,600	21,333	21,947	22,356	23,265	23,922	24,370	24,906	25,525	25,979	26,519
VACAR	28,599	30,584	31,646	32,496	33,465	34,416	35,439	36,492	37,579	38,656	39,466
SERC	85,664	92,662	95,469	97,860	100,940	104,152	106,825	109,827	113,265	116,435	119,253
GROUP A	15,118	15,628	16,247	16,771	17,222	17,765	18,249	18,676	19,152	19,680	20,150
GROUP B	10,289	10,864	11,328	11,732	12,178	12,607	13,083	13,595	14,105	14,648	15,253
GROUP C	7,336	8,110	8,439	8,813	9,088	9,367	9,658	9,951	10,291	10,587	10,891
SPP	32,743	34,602	36,014	37,316	38,488	39,739	40,990	42,222	43,548	44,915	46,294
NWPP – U.S.	28,147	33,018	34,464	35,617	36,849	38,125	39,128	40,131	41,185	42,096	41,364
RMPA	5,201	5,477	5,724	6,024	6,415	6,780	7,072	7,476	7,706	8,008	8,236
AZ-NM	6,102	6,888	7,304	7,599	7,962	8,350	8,722	9,076	9,438	9,783	10,064
CA-SNV	28,484	29,497	30,331	30,741	31,726	32,657	33,401	34,127	34,671	35,210	35,809
WSCC – U.S.*	67,934	74,880	77,823	79,981	82,952	85,912	88,323	90,810	92,973	95,097	95,473

FOOTNOTE TO TABLES 1-2

*Since the subregional peak demands may occur in different months than the coincident total WSCC (U.S.) peak demand, the sum of the individual subregional resources based on those peak demands may not always equal the WSCC (U.S.) total.



Net Electrical Energy Requirements

The *Net Electrical Energy Requirements* data represent the total annual electrical energy needed to serve the projected load.

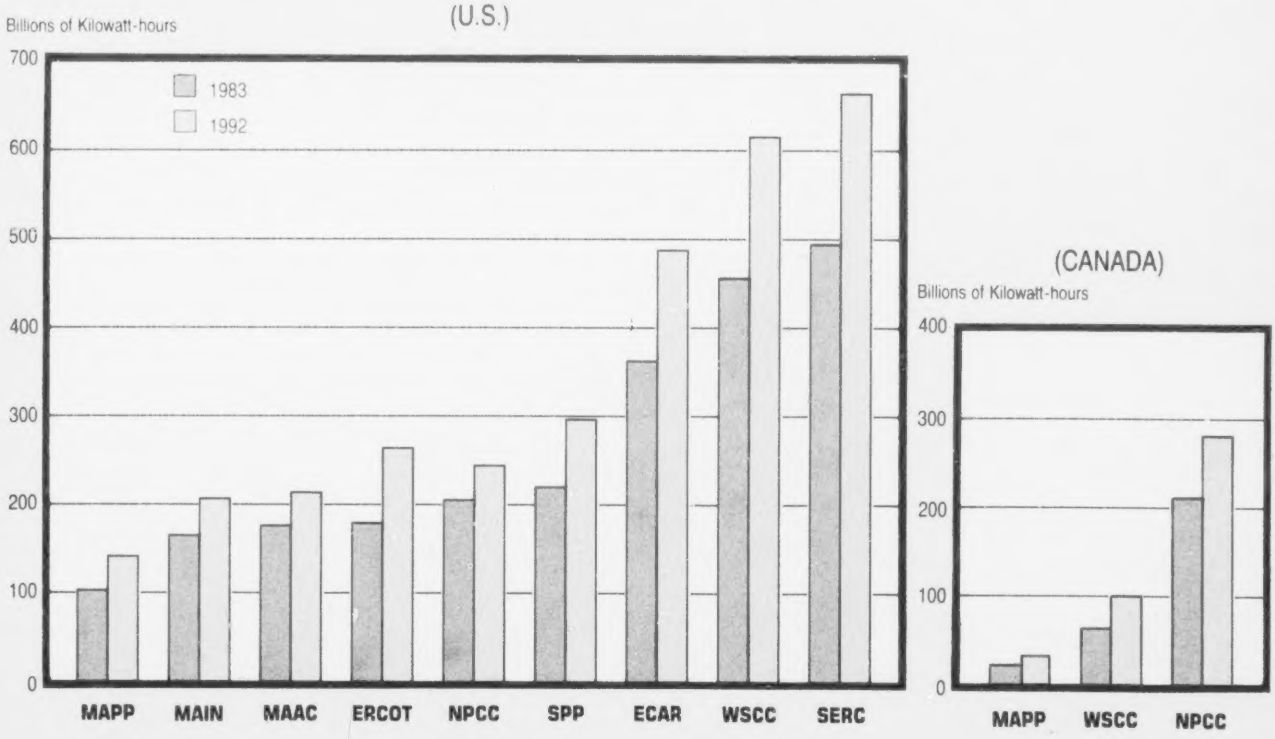
U.S. utilities are forecasting net energy requirements for 1983-1992 which, in the aggregate, result in an average annual growth rate of 3.2%. Last year's ten-year forecast rate was 3.3%.

Canadian utilities are forecasting a growth rate for 1983-1992 of 3.7%. Last year's ten-year forecast rate was 5.1% for Canada.

Even though the NERC regions are expecting a lower growth rate than in past years, based on this year's projections the industry will require 39% more electric energy ten years from now.

For a breakdown by principal energy sources of the electric generation needed to provide this energy through 1992, refer to Table 15.

NERC Net Energy Requirements



Net Energy for Load (Million KWh)

Regional Table 3

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	347,091	361,100	378,800	404,100	415,000	426,300	440,200	452,600	462,700	473,400	486,300
ERCOT	169,769	178,023	187,354	193,766	201,032	209,665	220,707	231,505	242,563	252,606	262,929
MAAC	171,662	175,464	180,646	185,173	189,214	192,944	197,174	201,370	205,435	209,159	212,779
MAIN	158,116	164,645	170,171	175,674	179,758	184,807	188,831	193,220	197,417	201,616	205,901
MAPP - U.S.	96,992	102,656	108,120	113,749	117,911	121,900	125,774	129,659	133,473	137,166	140,979
NPCC - U.S.	201,377	204,159	208,245	212,270	214,870	218,358	223,151	228,371	233,034	238,006	243,057
SERC	466,832	492,507	509,047	530,495	547,381	568,395	587,755	606,650	625,313	643,970	662,537
SPP	211,595	218,738	230,490	238,369	246,929	254,882	262,700	270,779	278,751	286,646	295,118
WSCC - U.S.	435,310	454,125	477,529	497,110	515,005	536,165	554,261	568,617	579,699	596,653	613,864
NERC - U.S.	2,258,744	2,351,417	2,450,402	2,550,706	2,627,100	2,713,416	2,800,553	2,882,771	2,958,385	3,039,222	3,123,464
MAPP - CANADA	23,358	23,932	26,042	27,625	29,290	30,290	31,542	32,579	33,749	34,729	35,659
NPCC - CANADA	206,330	213,060	223,251	232,705	241,593	248,611	255,757	262,170	268,797	275,632	283,062
WSCC - CANADA	61,491	66,390	71,500	75,662	80,728	84,941	88,414	91,776	95,180	99,412	103,254
NERC - CANADA	291,179	303,382	320,793	335,992	351,611	363,842	375,713	386,525	397,726	409,773	421,975

Net Energy for Load (Million KWh)

Subregional Table 3

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	64,378	65,500	68,100	70,800	72,200	73,650	75,100	76,600	78,150	79,700	81,300
EAST MISSOURI	26,302	27,416	28,012	28,603	29,297	29,983	30,680	31,364	32,048	32,762	33,492
SO. CENT. ILL.	30,622	32,298	32,870	34,052	35,068	36,812	37,532	38,554	39,545	40,550	41,564
WUM	36,814	39,431	41,189	42,219	43,193	44,362	45,519	46,702	47,674	48,604	49,545
MAIN	158,116	164,645	170,171	175,674	179,758	184,807	188,831	193,220	197,417	201,616	205,901
NEW YORK	117,147	116,434	117,753	120,397	122,511	124,493	126,909	129,311	131,356	133,430	135,596
NEW ENGLAND	84,230	87,725	90,492	91,873	92,359	93,865	96,242	99,060	101,678	104,576	107,461
NPCC - U.S.	201,377	204,159	208,245	212,270	214,870	218,358	223,151	228,371	233,034	238,006	243,057
NEW BRUNSWICK	8,015	8,562	9,501	9,959	10,375	10,675	10,939	11,200	11,461	11,724	11,985
ONTARIO	100,836	104,560	108,728	112,640	115,230	117,765	120,567	122,643	124,830	127,327	130,229
QUÉBEC	97,479	99,938	105,022	110,106	115,988	120,171	124,251	128,327	132,506	136,581	140,848
NPCC - CANADA	206,330	213,060	223,251	232,705	241,593	248,611	255,757	262,170	268,797	275,632	283,062
FLORIDA	94,994	100,637	102,923	107,076	110,791	114,498	118,376	122,182	126,154	130,378	134,717
SOUTHERN	108,547	113,324	117,878	121,631	125,199	128,861	132,951	137,782	141,793	145,916	149,956
TVA	110,036	116,973	119,603	124,608	129,204	136,827	142,032	145,971	150,423	154,223	158,027
VACAR	153,255	161,573	168,643	177,180	182,187	188,209	194,396	200,715	206,943	213,453	219,837
SERC	466,832	492,507	509,047	530,495	547,381	568,395	587,755	606,650	625,313	643,970	662,537
GROUP A	101,986	102,874	108,821	112,627	116,484	119,415	122,597	125,999	128,877	131,983	135,461
GROUP B	65,540	70,006	74,482	76,828	79,727	82,493	85,501	88,502	91,873	95,083	98,702
GROUP C	44,069	45,858	47,187	48,914	50,718	52,974	54,602	56,278	58,001	59,580	60,955
SPP	211,595	218,738	230,490	238,369	246,929	254,882	262,700	270,779	278,751	286,646	295,118
NWPP - U.S.	173,321	178,947	193,809	201,121	208,012	216,507	223,410	225,457	228,272	236,213	244,718
RMPA	31,280	33,383	35,083	36,820	38,819	40,703	42,425	44,209	45,969	47,704	49,514
AZ-NM	42,717	48,625	52,090	57,578	61,380	65,970	69,566	74,921	76,937	79,244	81,654
CA-SNV	187,992	193,170	196,547	201,591	206,794	212,985	218,860	224,030	228,521	233,492	237,978
WSCC - U.S.	435,310	454,125	477,529	497,110	515,005	536,165	554,261	568,617	579,699	596,653	613,864

Net Electrical Energy Requirements Growth Rates

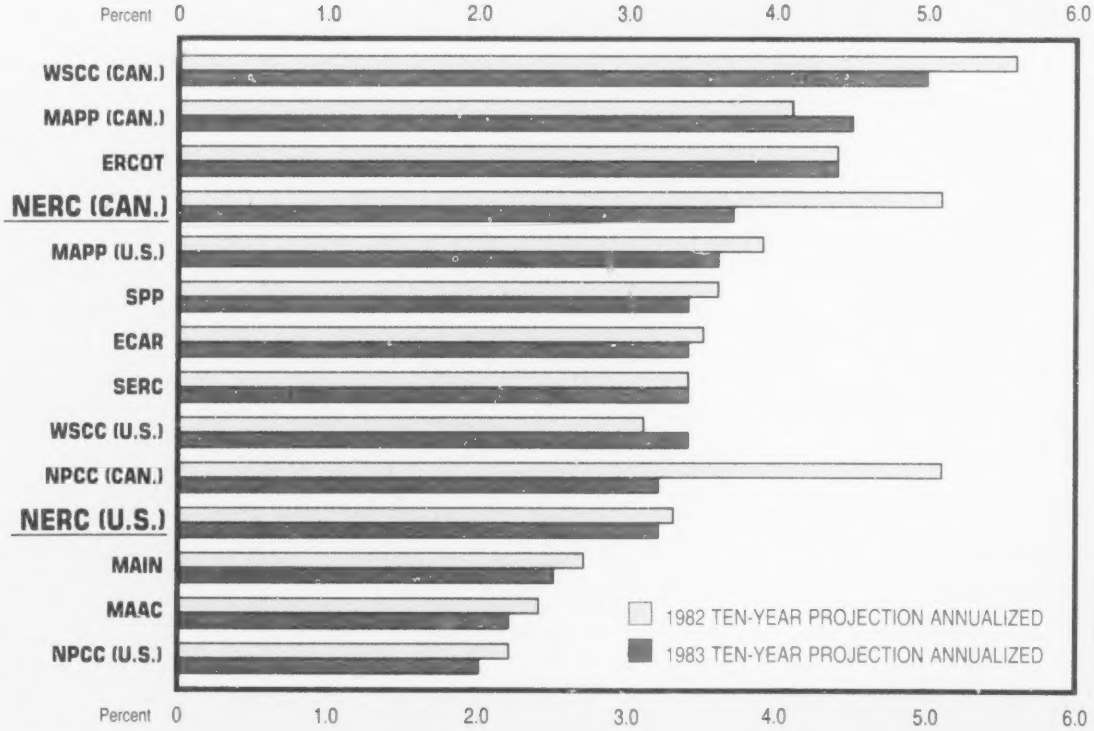
The growth rates of net electrical energy requirements of the NERC regions and subregions are expressed as a percent in the following tables. The average annual growth rates for the 1983-1992 period are shown in the right-hand column of each table.

U.S. utilities are forecasting net electrical energy requirements for 1983-1992 which, in the aggregate, result in an average annual growth rate of 3.2%. Last year's projected ten-year growth rate in the U.S. was 3.3%. Canadian utilities are forecasting a growth rate for 1983-1992 of 3.7%, down from the 5.1% ten-year rate forecast last year in Canada.

As shown by the chart below, WSCC–Canada is projecting a relatively high growth rate for electrical energy, at 5.0%. The growth rates of the NERC regions in the U.S. range from an average 2.0% annually, as projected by NPCC, to the 4.4% projected by ERCOT.

Subregional growth in the U.S. shows an even wider range, from the 1.7% expected by the New York subregion (NY) of NPCC, to the 5.9% expected by the Arizona-New Mexico Power Area (AZ-NM) of WSCC. NPCC's Canadian subregion of Québec is projecting a growth rate for net electrical energy of 3.9% for the 1983-1992 period, down from the ten-year rate of 6.6% they were projecting last year.

NERC Net Electrical Energy Growth Rates



Net Electrical Energy Growth Rates

Regional Table 4

(Percent)

REGION	1983–1984	1984–1985	1985–1986	1986–1987	1987–1988	1988–1989	1989–1990	1990–1991	1991–1992	1983–1992
ECAR	4.9	6.7	2.7	2.7	3.3	2.8	2.2	2.3	2.7	3.4
ERCOT	5.2	3.4	3.7	4.3	5.3	4.9	4.8	4.1	4.1	4.4
MAAC	3.0	2.5	2.2	2.0	2.2	2.1	2.0	1.8	1.7	2.2
MAIN	3.4	3.2	2.3	2.8	2.2	2.3	2.2	2.1	2.1	2.5
MAPP – U.S.	5.3	5.2	3.7	3.4	3.2	3.1	2.9	2.8	2.8	3.6
NPCC – U.S.	2.0	1.9	1.2	1.6	2.2	2.3	2.0	2.1	2.1	2.0
SERC	3.4	4.2	3.2	3.8	3.4	3.2	3.1	3.0	2.9	3.4
SPP	5.4	3.4	3.6	3.2	3.1	3.1	2.9	2.8	3.0	3.4
WSCC – U.S.	5.2	4.1	3.6	4.1	3.4	2.6	1.9	2.9	2.9	3.4
NERC – U.S.	4.2	4.1	3.0	3.3	3.2	2.9	2.6	2.7	2.8	3.2
MAPP – CANADA	8.8	6.1	6.0	3.4	4.1	3.3	3.6	2.9	2.7	4.5
NPCC – CANADA	4.8	4.2	3.8	2.9	2.9	2.5	2.5	2.5	2.7	3.2
WSCC – CANADA	7.7	5.8	6.7	5.2	4.1	3.8	3.7	4.4	3.9	5.0
NERC – CANADA	5.7	4.7	4.6	3.5	3.3	2.9	2.9	3.0	3.0	3.7

Subregional Table 4

(Percent)

SUBREGION	1983–1984	1984–1985	1985–1986	1986–1987	1987–1988	1988–1989	1989–1990	1990–1991	1991–1992	1983–1992
CMNWLTH ED.	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4
EAST MISSOURI	2.2	2.1	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2
SO. CENT. ILL.	1.8	3.6	3.0	5.0	2.0	2.7	2.6	2.5	2.5	2.8
WUM	4.5	2.5	2.3	2.7	2.6	2.6	[illegible]	2.0	1.9	2.6
MAIN	3.4	3.2	2.3	2.8	2.2	2.3	[illegible]	2.1	2.1	2.5
NEW YORK	1.1	2.2	1.8	1.6	1.9	1.9	1.6	1.6	1.6	1.7
NEW ENGLAND	3.2	1.5	.5	1.6	2.5	2.9	2.6	2.9	2.8	2.3
NPCC – U.S.	2.0	1.9	1.2	1.6	2.2	2.3	2.0	2.1	2.1	2.0
NEW BRUNSWICK	11.0	4.8	4.2	2.9	2.5	2.4	2.3	2.3	2.2	3.8
ONTARIO	4.0	3.6	2.3	2.2	2.4	1.7	1.8	2.0	2.3	2.5
QUÉBEC	5.1	4.8	5.3	3.6	3.4	3.3	3.3	3.1	3.1	3.9
NPCC – CANADA	4.8	4.2	3.8	2.9	2.9	2.5	2.5	2.5	2.7	3.2
FLORIDA	2.3	4.0	3.5	3.3	3.4	3.2	3.3	3.3	3.3	3.3
SOUTHERN	4.0	3.2	2.9	2.9	3.2	3.6	2.9	2.9	2.8	3.2
TVA	2.2	4.2	3.7	5.9	3.8	2.8	3.0	2.5	2.5	3.4
VACAR	4.4	5.1	2.8	3.3	3.3	3.3	3.1	3.1	3.0	3.5
SERC	3.4	4.2	3.2	3.8	3.4	3.2	3.1	3.0	2.9	3.4
GROUP A	5.8	3.5	3.4	2.5	2.7	2.8	2.3	2.4	2.6	3.1
GROUP B	6.4	3.1	3.8	3.5	3.6	3.5	3.8	3.5	3.8	3.9
GROUP C	2.9	3.7	3.7	4.4	3.1	3.1	3.1	2.7	2.3	3.2
SPP	5.4	3.4	3.6	3.2	3.1	3.1	2.9	2.8	3.0	3.4
NWPP – U.S.	8.3	3.8	3.4	4.1	3.2	.9	1.2	3.5	3.6	3.5
RMPA	5.1	5.0	5.4	4.9	4.2	4.2	4.0	3.8	3.8	4.5
AZ-NM	7.1	10.5	6.6	7.5	5.5	7.7	2.7	3.0	3.0	5.9
CA-SNV	1.7	2.6	2.6	3.0	2.8	2.4	2.0	2.2	1.9	2.3
WSCC – U.S.	5.2	4.1	3.6	4.1	3.4	2.6	1.9	2.9	2.9	3.4

Annual Load Factors

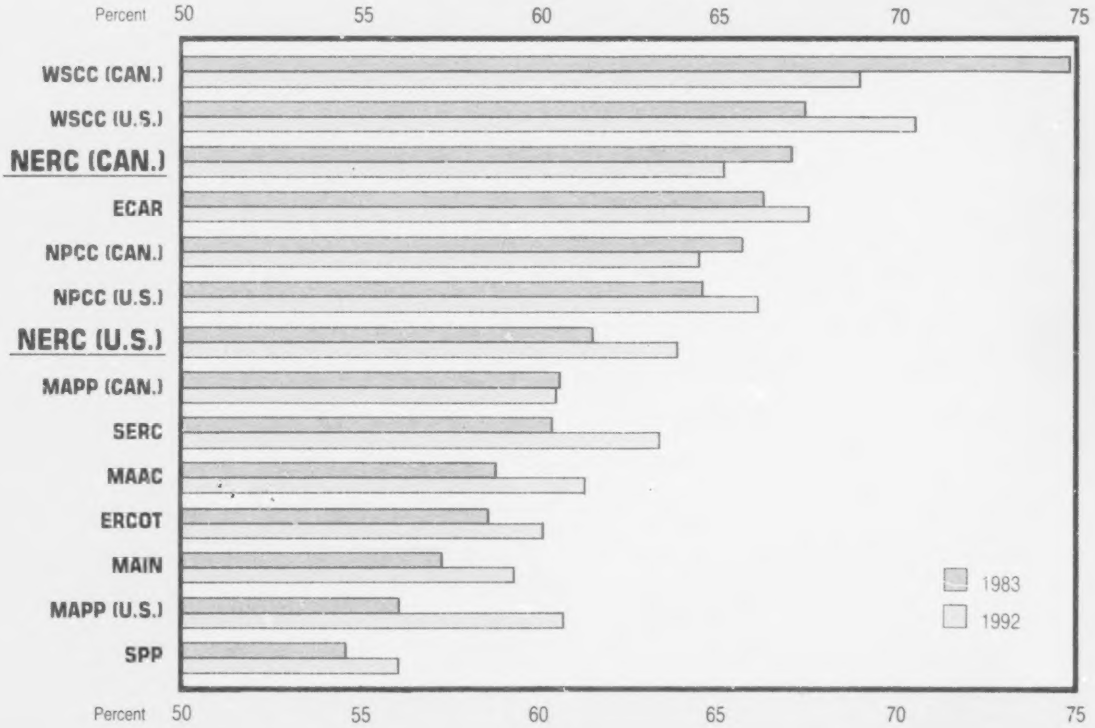
The annual load factors of the NERC regions and subregions are expressed as a percent in the following tables. Load factor is the ratio of average load to peak load for a specified period of time.

Load Factors are calculated here from *Net Energy for Load* (Table 3) divided by the product of the greater of *Summer* or previous *Winter Peak Demands* (Tables 1-2) multiplied by 8760 hours per year.

The lower load factors are generally found in areas with a high seasonal peak and little heavy industry. High load factors usually reflect a moderate, balanced climate or a heavier mix of industrial loads.

Regional load factors range from the mid-50's in SPP to the high 60's and low 70's in WSCC.

NERC Annual Load Factors



(Percent)

Regional Table 5

REGION	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	66.3	67.0	67.5	67.4	67.4	67.5	67.5	67.4	67.4	67.6
ERCOT	58.6	59.0	58.8	58.7	58.9	59.4	59.6	59.9	60.1	60.1
MAAC	58.8	59.4	59.8	60.2	60.4	60.7	60.8	61.0	61.1	61.3
MAIN	57.3	57.6	57.8	58.0	58.4	58.6	58.8	59.0	59.1	59.3
MAPP – U.S.	56.1	57.4	57.9	58.5	59.0	59.5	60.0	60.2	60.5	60.7
NPCC – U.S.	64.6	64.6	64.8	65.0	65.0	65.2	65.5	65.7	66.0	66.2
SERC	60.4	61.1	61.6	62.1	62.5	62.8	63.1	63.2	63.1	63.4
SPP	54.6	55.4	55.3	55.6	55.7	55.8	55.8	56.0	56.1	56.1
WSCC – U.S.	67.5	68.0	68.9	69.5	70.0	70.3	70.1	69.8	70.2	70.6
NERC – U.S.	61.5	62.1	62.5	62.8	63.1	63.3	63.5	63.5	63.7	63.9
MAPP – CANADA	60.6	62.2	61.9	61.9	61.1	61.0	60.9	61.0	60.6	60.5
NPCC – CANADA	65.7	65.5	65.3	64.9	64.7	64.6	64.5	64.3	64.4	64.5
WSCC – CANADA	74.9	68.9	68.3	69.3	68.7	68.7	68.7	68.7	69.2	69.0
NERC – CANADA	67.1	66.0	65.6	65.6	65.3	65.2	65.1	65.0	65.1	65.2

(Percent)

Subregional Table 5

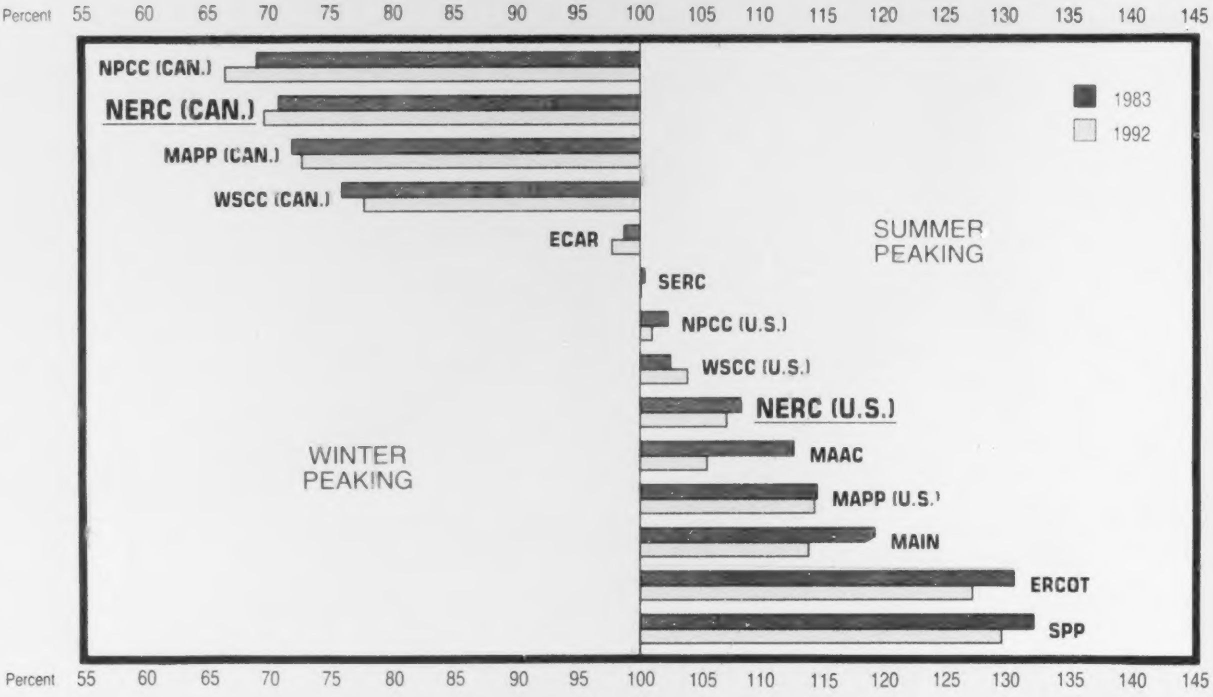
SUBREGION	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	55.2	55.1	55.2	55.1	55.1	55.1	55.2	55.2	55.1	55.1
EAST MISSOURI	51.7	52.3	52.9	53.4	53.9	54.5	55.1	55.6	56.1	56.6
SO. CENT. ILL.	56.1	55.7	55.9	56.1	57.4	57.2	57.3	57.5	57.5	57.7
WUM	68.2	69.3	69.6	69.9	70.5	70.9	71.3	71.6	72.0	72.5
MAIN	57.3	57.6	57.8	58.0	58.4	58.6	58.8	59.0	59.1	59.3
NEW YORK	63.6	63.6	64.0	64.1	64.2	64.4	64.7	64.9	65.1	65.3
NEW ENGLAND	64.1	64.2	63.4	63.2	64.3	65.2	65.8	65.8	66.1	66.1
NPCC – U.S.	64.6	64.6	64.8	65.0	65.0	65.2	65.5	65.7	66.0	66.2
NEW BRUNSWICK	68.1	69.8	67.3	68.1	67.9	67.5	67.2	66.9	66.7	66.4
ONTARIO	69.2	70.8	70.5	70.5	70.6	70.8	71.2	71.5	72.0	72.5
QUÉBEC	62.3	60.5	60.5	60.0	59.6	59.3	59.0	58.6	58.4	58.4
NPCC – CANADA	65.7	65.5	65.3	64.9	64.7	64.6	64.5	64.3	64.4	64.5
FLORIDA	54.1	53.0	53.6	54.1	54.7	55.2	56.2	56.9	56.8	57.0
SOUTHERN	58.5	59.2	59.4	59.7	59.7	60.0	60.2	60.1	60.0	60.1
TVA	64.7	64.0	64.8	66.0	67.1	67.2	67.1	67.1	67.1	67.1
VACAR	59.8	60.7	61.6	62.2	62.6	62.8	63.0	63.3	63.4	63.9
SERC	60.4	61.1	61.6	62.1	62.5	62.8	63.1	63.2	63.1	63.4
GROUP A	59.4	60.5	60.2	60.4	60.2	60.1	60.0	60.0	59.9	59.8
GROUP B	52.9	53.8	53.6	53.8	53.8	54.0	54.1	54.4	54.7	55.1
GROUP C	48.3	48.2	48.7	49.2	50.1	50.3	50.6	50.8	51.0	50.7
SPP	54.6	55.4	55.3	55.6	55.7	55.8	55.8	56.0	56.1	56.1
NWPP – U.S.	72.6	67.0	66.6	66.7	67.1	66.9	65.8	64.9	65.5	66.4
RMPA	68.1	68.5	68.8	68.3	68.6	67.8	67.5	67.7	67.9	68.0
AZ-NM	59.0	59.9	62.6	64.2	65.9	66.3	68.4	67.6	67.0	66.7
CA-SNV	57.4	57.7	58.6	59.3	59.5	59.9	60.1	60.3	60.5	60.6
WSCC – U.S.	67.5	68.0	68.9	69.5	70.0	70.3	70.1	69.8	70.2	70.6

Summer/Winter Peak Demand Ratios

The relationships between the summer and winter peak demands of the NERC regions and subregions are expressed in the following tables as a percent: the summer peak divided by the peak of the following winter.

The seasonal demand ratios range from the heavy winter peaking NPCC (Canada) to the heavy summer peaking SPP and ERCOT.

NERC Summer/Winter Peak Demand Ratios



(Percent)

Regional Table 6

REGION	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	98.7	96.2	98.7	98.7	98.2	98.1	98.3	98.1	97.9	97.7
ERCOT	130.6	130.4	131.5	131.0	129.9	129.3	128.6	128.3	127.6	127.2
MAAC	112.6	112.1	111.6	110.2	108.8	107.9	107.2	106.5	105.9	105.5
MAIN	119.2	119.4	119.2	118.5	117.6	116.6	116.0	115.1	114.4	113.8
MAPP – U.S.	114.5	114.5	113.6	114.1	114.6	114.8	114.8	115.1	114.7	114.3
NPCC – U.S.	102.3	102.0	102.2	102.2	102.4	102.1	101.9	101.6	101.3	101.0
SERC	100.4	99.6	100.4	99.7	99.7	100.0	100.0	99.7	100.0	100.1
SPP	132.2	131.9	131.8	131.7	131.4	131.1	131.1	130.5	129.9	129.6
WSCC – U.S.	102.5	102.9	103.0	102.0	101.8	102.0	101.9	101.9	102.0	103.9
NERC – U.S.	108.3	107.6	108.2	107.8	107.4	107.4	107.2	107.0	106.8	107.1
MAPP – CANADA	71.6	71.4	71.4	72.4	71.8	72.3	72.1	72.3	72.3	72.4
NPCC – CANADA	68.7	68.4	68.3	68.3	68.0	67.3	67.0	66.7	66.7	66.1
WSCC – CANADA	75.7	76.2	76.6	76.9	77.0	77.0	77.3	77.5	77.5	77.5
NERC – CANADA	70.5	70.4	70.4	70.5	70.3	69.9	69.8	69.7	69.7	69.3

(Percent)

Subregional Table 6

SUBREGION	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	123.5	126.0	128.3	128.3	128.4	128.3	128.1	128.0	128.1	128.2
EAST MISSOURI	135.2	131.5	127.6	124.5	121.3	117.9	115.1	112.3	109.5	107.5
SO. CENT. ILL.	115.9	114.5	112.9	112.0	111.1	110.1	110.0	108.8	108.4	107.7
WUM	103.4	104.1	103.7	103.3	102.7	102.2	102.0	101.6	101.2	100.6
MAIN	119.2	119.4	119.2	118.5	117.6	116.6	116.0	115.1	114.4	113.8
NEW YORK	109.1	108.0	107.9	107.6	107.4	106.7	106.5	106.2	105.7	105.6
NEW ENGLAND	94.2	94.9	95.4	95.7	96.3	96.5	96.4	96.2	96.0	95.6
NPCC – U.S.	102.3	102.0	102.2	102.2	102.4	102.1	101.9	101.6	101.3	101.0
NEW BRUNSWICK	74.8	72.8	72.7	72.2	71.8	71.5	71.1	71.0	70.7	70.5
ONTARIO	80.0	79.6	80.7	80.4	80.5	80.4	80.4	80.3	80.6	79.8
QUÉBEC	58.2	58.2	57.4	57.9	57.5	56.6	56.3	56.0	56.0	55.7
NPCC – CANADA	68.7	68.4	68.3	68.3	68.0	67.3	67.0	66.7	66.7	66.1
FLORIDA	87.6	87.4	87.9	88.5	88.3	89.0	88.9	88.2	88.8	89.3
SOUTHERN	119.1	119.3	119.0	117.7	115.4	113.8	112.9	112.5	111.8	111.1
TVA	96.0	94.4	96.3	95.1	97.4	99.1	99.7	100.2	101.0	101.4
VACAR	100.8	100.2	101.0	100.0	99.8	99.7	99.6	99.3	99.5	99.5
SERC	100.4	99.6	100.4	99.7	99.7	100.0	100.0	99.7	100.0	100.1
GROUP A	126.6	126.3	127.3	127.7	127.5	127.5	128.3	128.0	127.8	128.3
GROUP B	139.1	139.5	139.4	138.9	138.7	138.3	137.4	136.8	135.6	134.0
GROUP C	133.6	132.4	130.1	129.5	128.9	128.3	127.7	126.6	125.9	126.0
SPP	132.2	131.9	131.8	131.7	131.4	131.1	131.1	130.5	129.9	129.6
NWPP – U.S.	71.9	74.4	74.5	74.4	75.0	75.3	75.2	75.1	75.2	78.2
RMPA	102.2	102.2	101.4	101.2	100.0	101.0	100.0	100.6	100.2	101.0
AZ-NM	136.7	135.9	138.3	137.1	136.8	137.3	137.8	137.7	138.0	138.9
CA-SNV	130.2	128.1	127.7	125.4	125.1	124.8	124.8	124.9	125.1	125.2
WSCC – U.S.	102.5	102.9	103.0	102.0	101.8	102.0	101.9	101.9	102.0	103.9

Peak Demand Growth Rates

The summer and winter peak demand growth rates of the NERC regions and subregions are expressed as a percent in the following tables. The average annual growth rates for the ten-year period are shown in the right-hand column of each table.

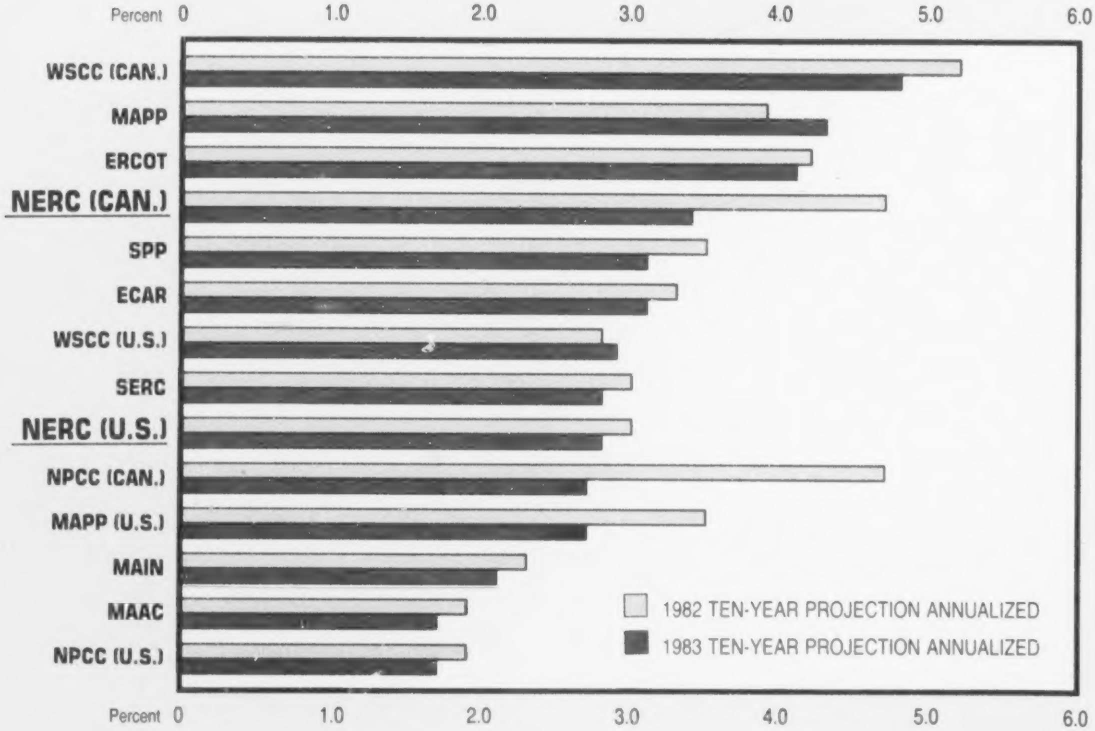
U.S. utilities are forecasting summer peak demands for 1983-1992 which, in the aggregate, result in an average annual growth rate of 2.8%. Last year's ten-year forecast rate was 3.0%.

Canadian utilities are forecasting winter peak demands for 1983-1992 which result in an average annual growth rate of 3.6%. Last year's ten-year forecast rate in Canada was 4.8%.

The summer peak demand growth rates of the NERC regions in the U.S. range from a low of 1.7% annually, as projected by MAAC and by NPCC, to 4.1% projected by ERCOT. WSCC (Canada) is showing a 4.8% growth rate.

Subregional summer growth shows an even wider range, from the 1.2% expected by the East Missouri Group of MAIN, to the 4.5% expected by the Rocky Mountain Power Area (RMPA) and the Arizona-New Mexico Power Area (AZ-NM) of WSCC.

NERC Summer Peak Demand Growth Rates



Summer (Percent)

Regional Table 7

REGION	1983–1984	1984–1985	1985–1986	1986–1987	1987–1988	1988–1989	1989–1990	1990–1991	1991–1992	1983–1992
ECAR	3.9	5.9	2.8	2.7	3.2	2.8	2.3	2.4	2.4	3.1
ERCOT	4.4	3.8	4.0	3.9	4.5	4.4	4.2	3.9	4.1	4.1
MAAC	1.9	1.8	1.6	1.5	1.8	1.9	1.7	1.6	1.5	1.7
MAIN	3.0	2.9	2.0	2.0	1.9	2.0	1.8	1.9	1.8	2.1
MAPP – U.S.	2.9	4.2	2.6	2.5	2.4	2.3	2.6	2.2	2.5	2.7
NPCC – U.S.	2.1	1.5	1.0	1.6	1.9	1.9	1.6	1.8	1.7	1.7
SERC	2.2	3.3	2.5	3.2	2.9	2.8	2.9	3.1	2.5	2.8
SPP	3.8	3.6	3.1	3.0	2.9	3.0	2.7	2.6	2.9	3.1
WSCC – U.S.	4.4	2.8	2.7	3.4	3.0	2.8	2.4	2.3	2.3	2.9
NERC – U.S.	3.2	3.4	2.5	2.8	2.8	2.7	2.5	2.5	2.4	2.8
MAPP – CANADA	6.1	6.1	6.2	3.4	4.2	3.2	3.8	2.9	2.7	4.3
NPCC – CANADA	4.1	4.2	3.2	2.6	1.7	2.2	2.0	2.5	1.9	2.7
WSCC – CANADA	7.5	5.8	6.5	4.3	3.8	4.0	4.0	4.2	3.4	4.8
NERC – CANADA	5.1	4.7	4.3	3.1	2.4	2.8	2.7	3.0	2.3	3.4

Summer (Percent)

Subregional Table 7

SUBREGION	1983–1984	1984–1985	1985–1986	1986–1987	1987–1988	1988–1989	1989–1990	1990–1991	1991–1992	1983–1992
CMNWLTH ED.	4.1	3.9	2.0	2.0	2.0	1.9	1.9	2.2	2.1	2.5
EAST MISSOURI	1.0	1.0	1.5	1.3	1.1	1.2	1.3	1.2	1.4	1.2
SO. CENT. ILL.	2.6	3.2	2.7	2.5	2.3	2.5	2.3	2.4	2.1	2.5
WUM	2.7	2.1	1.8	1.9	2.0	2.1	1.5	1.5	1.2	1.9
MAIN	3.0	2.9	2.0	2.0	1.9	2.0	1.8	1.9	1.8	2.1
NEW YORK	1.1	1.6	1.5	1.5	1.6	1.5	1.2	1.3	1.4	1.4
NEW ENGLAND	3.5	1.4	.3	1.8	2.2	2.5	2.2	2.4	2.2	2.1
NPCC – U.S.	2.1	1.5	1.0	1.6	1.9	1.9	1.6	1.8	1.7	1.7
NEW BRUNSWICK	5.9	2.8	2.5	2.5	2.4	2.3	2.4	2.2	2.3	2.8
ONTARIO	3.3	3.8	1.8	2.1	1.1	1.2	1.3	1.9	1.2	2.0
QUÉBEC	4.9	4.8	5.0	3.2	2.3	3.4	2.8	3.3	2.6	3.6
NPCC – CANADA	4.1	4.2	3.2	2.6	1.7	2.2	2.0	2.5	1.9	2.7
FLORIDA	2.7	3.0	2.9	2.2	2.2	1.8	2.7	3.7	2.9	2.7
SOUTHERN	2.7	2.8	2.4	3.0	2.6	3.3	3.2	3.0	2.7	2.9
TVA	.3	3.9	2.8	5.3	3.6	2.9	3.0	2.6	2.5	3.0
VACAR	2.9	3.4	2.0	2.6	2.9	2.9	2.7	3.0	2.1	2.7
SERC	2.2	3.3	2.5	3.2	2.9	2.8	2.9	3.1	2.5	2.8
GROUP A	3.7	4.1	3.0	3.0	2.7	3.0	2.3	2.6	2.8	3.0
GROUP B	4.5	3.6	3.4	3.4	3.4	3.3	3.2	2.9	2.9	3.4
GROUP C	3.1	2.7	2.6	2.6	2.6	2.6	2.5	2.3	2.9	2.7
SPP	3.8	3.6	3.1	3.0	2.9	3.0	2.7	2.6	2.9	3.1
NWPP – U.S.	8.1	3.4	3.3	4.2	3.0	2.5	2.5	2.4	2.1	3.5
RMPA	4.5	4.5	6.3	4.4	5.4	4.6	3.7	3.5	3.7	4.5
AZ-NM	5.4	5.8	3.8	4.7	4.8	4.5	3.9	3.9	3.5	4.5
CA-SNV	1.2	1.0	1.3	2.7	2.0	2.2	1.7	1.7	1.8	1.7
WSCC – U.S.	4.4	2.8	2.7	3.4	3.0	2.8	2.4	2.3	2.3	2.9

Winter (Percent)

Subregional Table 8

REGION	1983/84–1984/85	1984/85–1985/86	1985/86–1986/87	1986/87–1987/88	1987/88–1988/89	1988/89–1989/90	1989/90–1990/91	1990/91–1991/92	1991/92 – 1992/93	1983/84 – 1992/93
ECAR	6.6	3.2	2.8	3.3	3.2	2.6	2.6	2.6	2.5	3.2
ERCOT	4.6	2.9	4.3	4.8	5.0	5.0	4.5	4.4	4.4	4.4
MAAC	2.4	2.3	2.8	2.8	2.7	2.6	2.3	2.2	1.9	2.4
MAIN	2.7	3.0	2.7	2.7	2.8	2.5	2.6	2.5	2.4	2.7
MAPP – U.S.	2.8	5.1	2.1	2.1	2.3	2.2	2.3	2.5	2.9	2.7
NPCC – U.S.	2.4	1.3	.9	1.5	2.1	2.1	1.9	2.1	2.0	1.8
SERC	3.0	2.5	3.1	3.2	2.6	2.8	3.1	2.8	2.4	2.8
SPP	4.1	3.6	3.1	3.3	3.1	3.0	3.1	3.1	3.1	3.3
WSCC – U.S.	3.9	2.8	3.7	3.6	2.8	2.8	2.4	2.3	.4	2.7
NERC – U.S.	3.8	2.8	3.0	3.1	2.9	2.8	2.8	2.7	2.2	2.9
MAPP – CANADA	6.5	6.0	4.7	4.3	3.5	3.5	3.5	2.9	2.7	4.2
NPCC – CANADA	4.6	4.4	3.2	3.1	2.7	2.7	2.5	2.5	2.7	3.2
WSCC – CANADA	6.8	5.3	6.0	4.2	3.7	3.7	3.7	4.2	3.4	4.5
NERC – CANADA	5.2	4.7	4.0	3.4	3.0	3.0	2.9	2.9	2.9	3.6

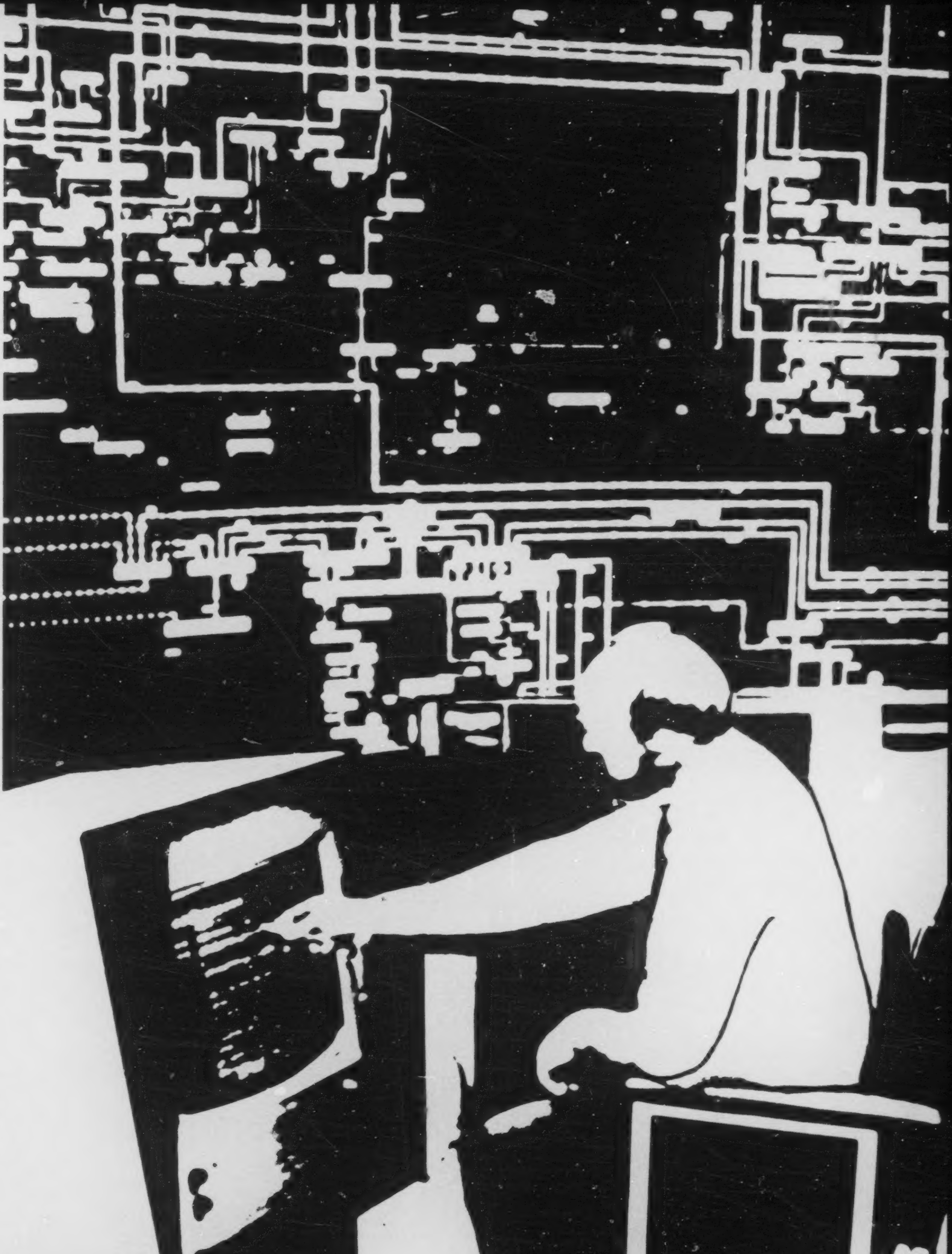
Winter (Percent)

Regional Table 8

SUBREGION	1983/84–1984/85	1984/85–1985/86	1985/86–1986/87	1986/87–1987/88	1987/88–1988/89	1988/89–1989/90	1989/90–1990/91	1990/91–1991/92	1991/92 - 1992/93	1983/84-1992/93
CMNWLTH ED.	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.0
EAST MISSOURI	3.8	4.1	4.0	4.0	4.0	3.7	3.8	3.8	3.3	3.8
SO. CENT. ILL.	4.0	4.6	3.4	3.4	3.3	2.6	3.3	2.9	2.8	3.4
WUM	2.1	2.5	2.2	2.4	2.6	2.2	1.9	2.0	1.8	2.2
MAIN	2.7	3.0	2.7	2.7	2.8	2.5	2.6	2.5	2.4	2.7
NEW YORK	2.1	1.7	1.8	1.7	2.2	1.7	1.5	1.7	1.5	1.8
NEW ENGLAND	2.8	.8	-.1	1.1	2.0	2.6	2.4	2.7	2.6	1.9
NPCC – U.S.	2.4	1.3	.9	1.5	2.1	2.1	1.9	2.1	2.0	1.8
NEW BRUNSWICK	8.8	3.0	3.2	3.0	2.9	2.8	2.6	2.6	2.5	3.5
ONTARIO	3.8	2.4	2.1	2.0	1.2	1.3	1.3	1.6	2.2	2.0
QUÉBEC	5.8	6.2	4.2	4.0	3.9	3.9	3.4	3.2	3.1	4.1
NPCC – CANADA	4.6	4.4	3.2	3.1	2.7	2.7	2.5	2.5	2.7	3.2
FLORIDA	3.0	2.4	2.2	2.4	1.4	2.0	3.5	3.0	2.3	2.5
SOUTHERN	2.6	3.1	3.5	5.0	4.0	4.1	3.6	3.6	3.4	3.7
TVA	2.9	1.9	4.1	2.8	1.9	2.2	2.5	1.8	2.1	2.4
VACAR	3.5	2.7	3.0	2.8	3.0	3.0	3.0	2.9	2.1	2.9
SERC	3.0	2.5	3.1	3.2	2.6	2.8	3.1	2.8	2.4	2.8
GROUP A	4.0	3.2	2.7	3.2	2.7	2.3	2.5	2.8	2.4	2.9
GROUP B	4.3	3.6	3.8	3.5	3.8	3.9	3.8	3.8	4.1	3.8
GROUP C	4.1	4.4	3.1	3.1	3.1	3.0	3.4	2.9	2.9	3.3
SPP	4.1	3.6	3.1	3.3	3.1	3.0	3.1	3.1	3.1	3.3
NWPP – U.S.	4.4	3.3	3.5	3.5	2.6	2.6	2.6	2.2	-1.7 *	2.5
RMPA	4.5	5.2	6.5	5.7	4.3	5.7	3.1	3.9	2.8	4.6
AZ-NM	6.0	4.0	4.8	4.9	4.5	4.1	4.0	3.7	2.9	4.3
CA-SNV	2.8	1.4	3.2	2.9	2.3	2.2	1.6	1.6	1.7	2.2
WSCC – U.S.	3.9	2.8	3.7	3.6	2.8	2.8	2.4	2.3	.4 *	2.7

FOOTNOTE TO TABLE 8

*Reflects the difference between the peak winter month of January, and the following December, the last month of the reporting period.



Planned Resources

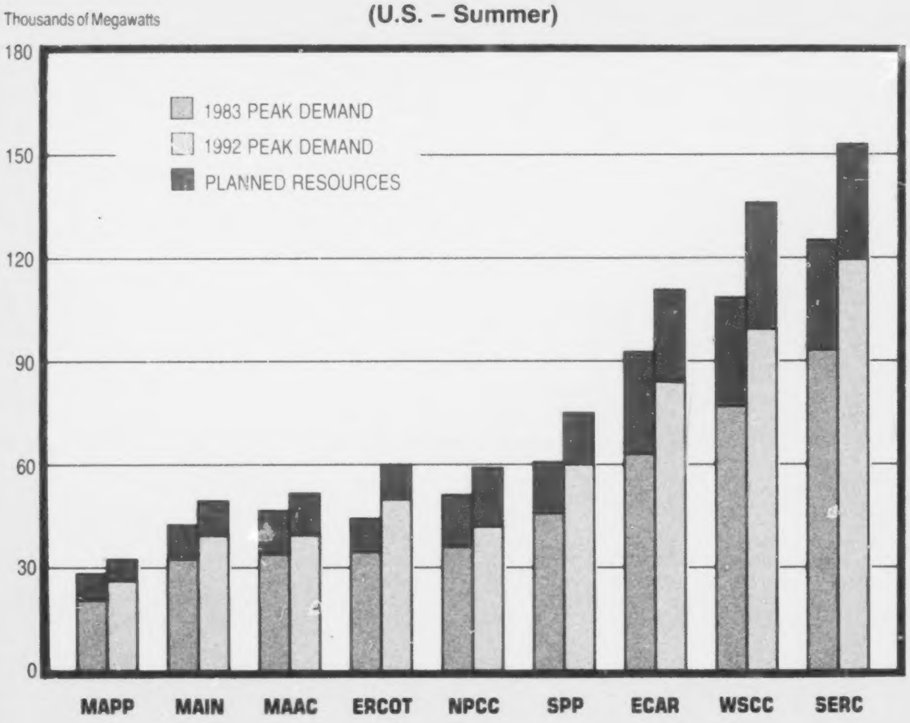
Planned Resources data include the total installed generating capacity which is existing, presently under construction, or in various stages of planning; plus scheduled capacity purchases, less capacity sales; less total generating capacity out of service in deactivated shutdown status.

The realization of these resource projections is contingent upon the scheduled completion of that generating capacity which is in various stages of construction, licensing, design or planning.

The Projected Peak Demands for the various NERC regions (Tables 1-2) may occur in different months within a given season. The Planned Resources data of Tables 9-10 correspond with the months of these Projected Peak Demands. In addition to meeting projected peak demand requirements, these resources are needed to provide for scheduled maintenance and emergency outages of generating units, and for system operating requirements.

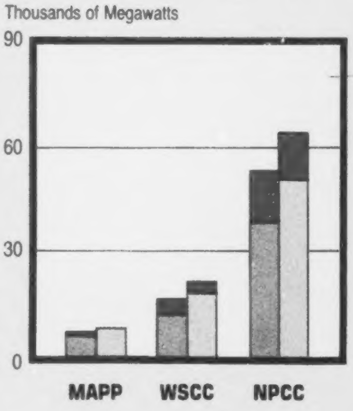
For a breakdown by principal capacity and fuel types of the installed generating capability included in these Planned Resources data, refer to Table 13.

NERC Planned Resources Over Peak Demands



Planned Resources Over Peak Demands

(CANADA – Winter)



Summer (MW)

Regional Table 9

REGION	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	87,844	93,042	96,571	98,970	102,094	103,925	104,438	105,760	106,930	107,680
ERCOT	44,405	44,688	45,939	47,977	50,142	51,745	55,537	56,200	57,830	60,092
MAAC	46,856	48,048	49,428	49,641	50,449	50,712	51,495	52,200	51,230	51,803
MAIN	42,751	44,069	46,766	48,990	50,100	49,804	49,822	49,856	49,912	49,733
MAPP – U.S.	28,680	29,571	29,633	30,083	30,152	31,052	31,819	31,840	32,778	32,824
NPCC – U.S.	51,214	53,075	54,911	55,931	57,862	57,538	57,636	59,291	59,403	59,067
SERC	124,991	128,554	131,570	135,028	140,415	143,570	147,621	148,345	150,389	152,782
SPP	60,718	63,347	66,765	68,285	68,641	69,596	70,972	72,912	73,745	74,941
WSCC – U.S.	108,456	115,595	120,631	121,235	124,987	126,281	127,864	129,723	134,660	135,900
NERC – U.S.	595,915	619,989	642,214	656,140	674,842	684,223	697,204	706,127	716,877	724,822
MAPP – CANADA	6,260	6,460	6,544	6,712	6,712	6,712	6,712	6,716	6,996	6,951
NPCC – CANADA	46,277	49,856	53,157	55,215	56,471	57,469	58,416	58,984	59,757	61,946
WSCC – CANADA	15,315	17,111	18,227	18,786	19,479	19,934	20,291	20,605	21,438	21,881
NERC – CANADA	67,852	73,427	77,928	80,713	82,662	84,115	85,419	86,305	88,191	90,778

Summer (MW)

Subregional Table 9

SUBREGION	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	17,154	18,952	18,952	20,937	22,252	21,940	21,940	21,940	21,940	21,940
EAST MISSOURI	7,442	7,167	8,075	8,075	8,076	8,082	8,089	8,125	8,134	8,135
SO. CENT. ILL.	8,945	8,930	9,768	9,768	9,768	9,768	9,768	9,792	9,828	9,828
WUM	9,210	9,020	9,971	10,210	10,004	10,014	10,025	9,999	10,010	9,830
MAIN	42,751	44,069	46,766	48,990	50,100	49,804	49,822	49,856	49,912	49,733
NEW YORK	29,971	31,651	32,327	32,338	33,123	33,123	33,274	34,948	34,995	34,996
NEW ENGLAND	21,240	21,421	22,584	23,593	24,739	24,415	24,362	24,343	24,408	24,071
NPCC – U.S.	51,214	53,075	54,911	55,931	57,862	57,538	57,636	59,291	59,403	59,067
NEW BRUNSWICK	2,759	2,759	2,759	2,892	2,892	2,892	2,892	2,892	3,127	3,127
ONTARIO	20,891	21,782	23,893	25,851	27,065	28,031	28,945	29,234	29,267	30,181
QUÉBEC	22,627	25,315	26,505	26,472	26,514	26,546	26,579	26,858	27,363	28,638
NPCC – CANADA	46,277	49,856	53,157	55,215	56,471	57,469	58,416	58,984	59,757	61,946
FLORIDA	27,693	27,993	30,690	30,672	32,127	32,070	33,324	33,302	33,893	34,318
SOUTHERN	29,837	30,001	29,248	29,279	31,504	31,854	34,576	34,372	34,870	36,118
TVA	28,171	28,698	30,213	31,383	32,560	33,737	33,737	33,737	33,737	33,737
VACAR	39,290	41,862	41,419	43,694	44,224	45,909	45,984	46,934	47,889	48,609
SERC	124,991	128,554	131,570	135,028	140,415	143,570	147,621	148,345	150,389	152,782
GROUP A	27,046	28,663	29,731	30,703	30,673	31,042	31,731	32,513	32,254	32,377
GROUP B	18,946	19,718	20,983	21,563	21,994	21,893	22,499	23,517	24,007	24,789
GROUP C	14,726	14,966	16,051	16,019	15,974	16,661	16,742	16,882	17,484	17,775
SPP	60,718	63,347	66,765	68,285	68,641	69,596	70,972	72,912	73,745	74,941
NWPP – U.S.	40,195	42,686	43,661	46,393	48,741	49,572	49,917	50,401	52,958	54,043
RMPA	7,873	8,635	8,846	8,982	9,080	9,128	9,627	9,688	9,700	10,054
AZ-NM	12,402	13,548	14,716	15,438	16,119	16,349	16,816	17,088	18,448	19,057
CA-SNV	48,362	51,499	51,928	50,823	52,469	52,599	53,362	54,608	55,146	55,489
WSCC – U.S.*	108,456	115,595	120,631	121,235	124,987	126,281	127,864	129,723	134,660	135,900

Winter (MW) — Regional Table 10

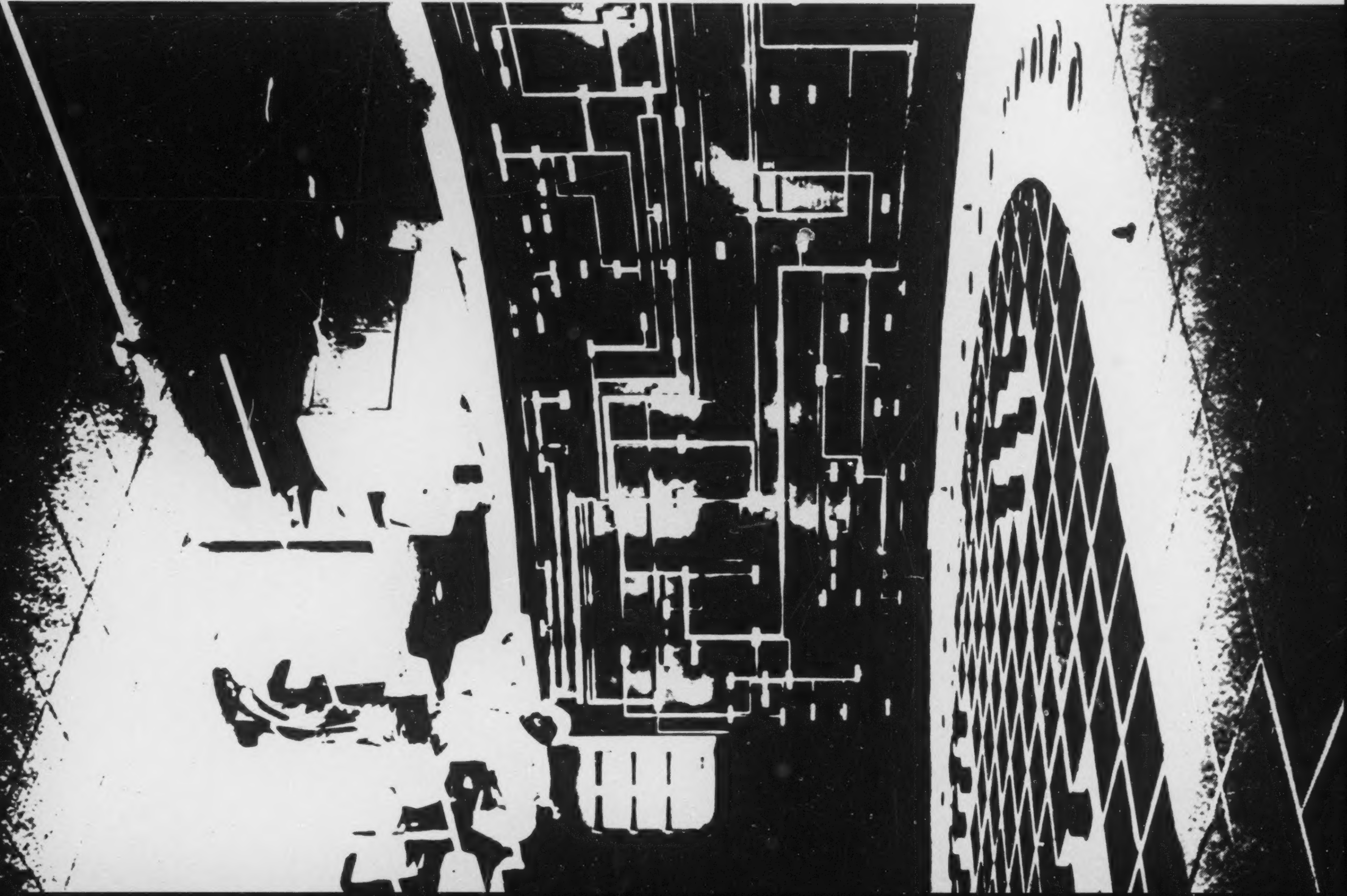
REGION	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
ECAR	92,641	98,216	99,293	103,476	103,071	105,870	106,793	108,571	109,231	110,675
ERCOT	44,401	45,814	46,080	48,005	50,306	52,330	56,058	56,488	57,750	61,418
MAAC	50,030	51,565	51,870	51,908	52,814	54,117	53,804	53,496	53,031	53,439
MAIN	43,558	45,907	49,785	50,925	50,934	50,639	50,622	50,694	50,549	50,521
MAPP – U.S.	29,290	29,604	29,724	29,988	30,544	31,674	31,666	32,096	32,626	32,810
NPCC – U.S.	53,036	55,702	55,603	56,843	58,442	58,335	59,527	60,281	59,987	59,858
SERC	128,679	131,063	135,920	138,737	144,736	146,265	149,453	150,180	152,370	154,736
SPP	61,291	63,393	66,772	67,906	67,431	70,058	70,894	71,713	72,837	73,489
WSCC – U.S.	112,763	116,424	119,723	123,730	125,950	127,123	129,455	131,652	135,940	136,747
NERC – U.S.	615,689	637,689	654,770	671,518	684,228	696,411	708,272	715,171	724,321	733,693
MAPP – CANADA	6,484	6,484	6,652	6,745	6,745	6,745	6,873	7,029	7,029	7,224
NPCC – CANADA	49,201	53,710	56,198	58,235	58,352	59,300	60,247	61,277	63,096	64,855
WSCC – CANADA	14,426	16,603	17,269	18,141	18,717	19,074	19,380	19,610	20,720	21,434
NERC – CANADA	70,111	76,797	80,119	83,121	83,814	85,119	86,500	87,916	90,845	93,513

Winter (MW) — Subregional Table 10

SUBREGION	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
CMNWLTH ED.	18,320	19,440	21,680	22,575	22,800	22,488	22,488	22,488	22,488	22,488
EAST MISSOURI	7,192	6,833	8,066	8,066	8,066	8,071	8,077	8,113	8,121	8,121
SO. CENT. ILL.	8,813	9,840	9,840	9,840	9,840	9,840	9,840	9,864	9,904	9,922
WUM	9,233	9,794	10,199	10,444	10,228	10,240	10,217	10,229	10,036	9,990
MAIN	43,558	45,907	49,785	50,925	50,934	50,639	50,622	50,694	50,549	50,521
NEW YORK	31,011	31,510	32,515	32,582	33,361	33,308	34,519	35,188	35,235	35,236
NEW ENGLAND	22,023	23,190	23,088	24,261	25,081	25,027	25,008	25,093	24,752	24,622
NPCC – U.S.	53,036	55,702	55,603	56,843	58,442	58,335	59,527	60,281	59,987	59,858
NEW BRUNSWICK	2,759	2,759	2,892	2,892	2,892	2,892	2,892	3,127	3,127	3,127
ONTARIO	21,411	23,663	25,517	27,512	27,597	28,511	29,425	29,714	30,628	31,542
QUÉBEC	25,031	27,286	27,789	27,831	27,863	27,897	27,930	28,436	29,341	30,186
NPCC – CANADA	49,201	53,710	56,198	58,235	58,352	59,300	60,247	61,277	63,096	64,855
FLORIDA	29,058	30,095	31,747	32,219	33,080	33,684	34,384	34,350	34,950	34,896
SOUTHERN	29,630	28,920	29,205	28,643	31,444	31,769	34,257	34,063	34,703	36,398
TVA	30,043	30,988	32,158	33,335	34,512	34,512	34,512	34,512	34,512	34,512
VACAR	39,948	41,060	42,810	44,540	45,700	46,300	46,300	47,255	48,205	48,930
SERC	128,679	131,063	135,920	138,737	144,736	146,265	149,453	150,180	152,370	154,736
GROUP A	28,307	29,497	30,253	30,509	30,319	31,563	32,337	32,060	32,495	31,840
GROUP B	17,943	18,836	20,387	21,277	21,036	21,755	21,851	23,007	22,922	24,106
GROUP C	15,041	15,060	16,132	16,120	16,076	16,740	16,706	16,646	17,420	17,543
SPP	61,291	63,393	66,772	67,906	67,431	70,058	70,894	71,713	72,837	73,489
NWPP – U.S.	42,955	44,572	47,316	49,612	50,447	50,772	51,261	52,575	54,251	54,608
RMPA	8,414	8,906	8,983	9,147	9,228	9,232	9,796	9,808	9,812	10,507
AZ-NM	12,268	13,525	14,551	15,160	16,011	16,538	16,983	16,980	18,802	18,950
CA-SNV	49,381	49,739	49,128	50,242	50,854	51,463	52,414	53,077	54,382	54,065
WSCC – U.S. *	112,763	116,424	119,723	123,730	125,950	127,123	129,455	131,652	135,940	136,747

FOOTNOTE TO TABLES 9-10

*Since the subregional peak demands may occur in different months than the coincident total WSCC (U.S.) peak demand, the sum of the individual subregional resources based on those peak demands may not always equal the WSCC (U.S.) total.



Planned Resources Growth Rates

The summer and winter planned resources growth rates of the NERC regions and subregions are expressed as a percent in the following tables. The average annual growth rates for the ten-year period are shown in the right-hand column of each table.

To meet forecast summer peak demands, U.S. utilities are planning on resources for 1983-1992 which, in the aggregate, result in an average annual growth rate of 2.2%. Last year's projected ten-year rate was 2.7%.

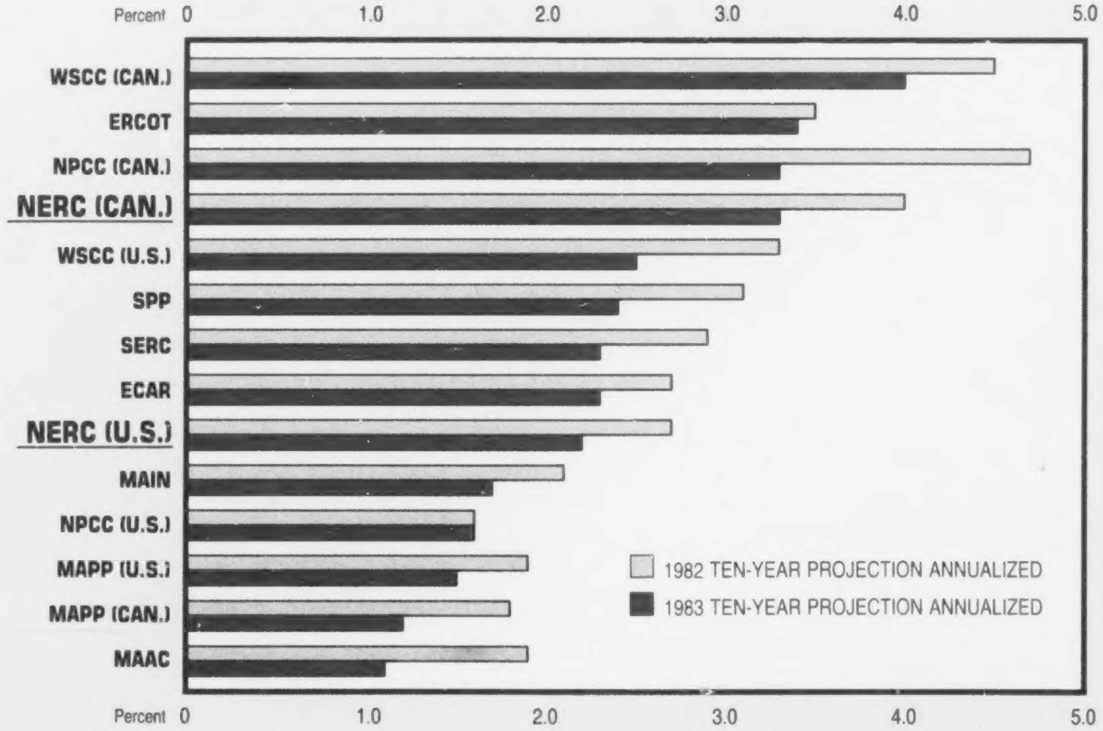
To meet their forecast winter peak demands, Canadian utilities are planning on resources for 1983-1992 which result in an average annual growth rate of 3.3%. Last year's ten-year forecast rate in Canada was 4.6%.

The summer planned resources growth rates of the NERC regions in the U.S. range from a low of 1.1% annually, as projected by MAAC, to 3.4%, projected by ERCOT.

Subregional summer growth shows an even wider range, from the 0.7% expected by the Wisconsin-Upper Michigan Systems Group (WUM) of MAIN, to the 4.9% expected by the Arizona-New Mexico Power Area (AZ-NM) of WSCC.

NPCC's Canadian subregion of Québec is projecting a winter planned resources growth rate of 2.1% for the 1983-1992 period, down from the ten-year rate of 6.1% they were projecting last year.

NERC Planned Summer Resources Growth Rates



Summer (Percent) — Regional Table 11

REGION	1983–1984	1984–1985	1985–1986	1986–1987	1987–1988	1988–1989	1989–1990	1990–1991	1991–1992	1983–1992
ECAR	5.9	3.8	2.5	3.2	1.8	.5	1.3	1.1	.7	2.3
ERCOT	.6	2.8	4.4	4.5	3.2	7.3	1.2	2.9	3.9	3.4
MAAC	2.5	2.9	.4	1.6	.5	1.5	1.4	-1.9	1.1	1.1
MAIN	3.1	6.1	4.8	2.3	-.6	.0	.1	.1	-.4	1.7
MAPP – U.S.	3.1	.2	1.5	.2	3.0	2.5	.1	2.9	.1	1.5
NPCC – U.S.	3.6	3.5	1.9	3.5	-.6	.2	2.9	.2	-.6	1.6
SERC	2.9	2.3	2.6	4.0	2.2	2.8	.5	1.4	1.6	2.3
SPP	4.3	5.4	2.3	.5	1.4	2.0	2.7	1.1	1.6	2.4
WSCC – U.S.	6.6	4.4	.5	3.1	1.0	1.3	1.5	3.8	.9	2.5
NERC – U.S.	4.0	3.6	2.2	2.9	1.4	1.9	1.3	1.5	1.1	2.2
MAPP – CANADA	3.2	1.3	2.6	.0	.0	.0	.1	4.2	-.6	1.2
NPCC – CANADA	7.7	6.6	3.9	2.3	1.8	1.6	1.0	1.3	3.7	3.3
WSCC – CANADA	11.7	6.5	3.1	3.7	2.3	1.8	1.5	4.0	2.1	4.0
NERC – CANADA	8.2	6.1	3.6	2.4	1.8	1.6	1.0	2.2	2.9	3.3

Summer (Percent) — Subregional Table 11

SUBREGION	1983–1984	1984–1985	1985–1986	1986–1987	1987–1988	1988–1989	1989–1990	1990–1991	1991–1992	1983–1992
CMNWLTH ED.	10.5	.0	10.5	6.3	-1.4	.0	.0	.0	.0	2.8
EAST MISSOURI	-3.7	12.7	.0	.0	.1	.1	.4	.1	.0	1.0
SO. CENT. ILL.	-.2	9.4	.0	.0	.0	.0	.2	.4	.0	1.1
WUM	-2.1	10.5	2.4	-2.0	.1	.1	-.3	.1	-1.8	.7
MAIN	3.1	6.1	4.8	2.3	-.6	.0	.1	.1	-.4	1.7
NEW YORK	5.6	2.1	.0	2.4	.0	.5	5.0	.1	.0	1.7
NEW ENGLAND	.9	5.4	4.5	4.9	-1.3	-.2	-.1	.3	-1.4	1.4
NPCC – U.S.	3.6	3.5	1.9	3.5	-.6	.2	2.9	.2	-.6	1.6
NEW BRUNSWICK	.0	.0	4.8	.0	.0	.0	.0	8.1	.0	1.4
ONTARIO	4.3	9.7	8.2	4.7	3.6	3.3	1.0	.1	3.1	4.2
QUÉBEC	11.9	4.7	-.1	.2	.1	.1	1.0	1.9	4.7	2.7
NPCC – CANADA	7.7	6.6	3.9	2.3	1.8	1.6	1.0	1.3	3.7	3.3
FLORIDA	1.1	9.6	-.1	4.7	-.2	3.9	-.1	1.8	1.3	2.4
SOUTHERN	.5	-2.5	.1	7.6	1.1	8.5	-.6	1.4	3.6	2.1
TVA	1.9	5.3	3.9	3.8	3.6	.0	.0	.0	.0	2.0
VACAR	6.5	-1.1	5.5	1.2	3.8	.2	2.1	2.0	1.5	2.4
SERC	2.9	2.3	2.6	4.0	2.2	2.8	.5	1.4	1.6	2.3
GROUP A	6.0	3.7	3.3	-.1	1.2	2.2	2.5	-.8	.4	2.0
GROUP B	4.1	6.4	2.8	2.0	-.5	2.8	4.5	2.1	3.3	3.0
GROUP C	1.6	7.2	-.2	-.3	4.3	.5	.8	3.6	1.7	2.1
SPP	4.3	5.4	2.3	.5	1.4	2.0	2.7	1.1	1.6	2.4
NWPP – U.S.	6.2	2.3	6.3	5.1	1.7	.7	1.0	5.1	2.0	3.3
RMPA	9.7	2.4	1.5	1.1	.5	5.5	.6	.1	3.6	2.8
AZ-NM	9.2	8.6	4.9	4.4	1.4	2.9	1.6	8.0	3.3	4.9
CA-SNV	6.5	.8	-2.1	3.2	.2	1.5	2.3	1.0	.6	1.5
WSCC – U.S.	6.6	4.4	.5	3.1	1.0	1.3	1.5	3.8	.9	2.5

Winter (Percent)

Regional Table 12

REGION	1983/84–1984/85	1984/85–1985/86	1985/86–1986/87	1986/87–1987/88	1987/88–1988/89	1988/89–1989/90	1989/90–1990/91	1990/91–1991/92	1991/92 – 1992/93	1983/84 – 1992/93
ECAR	6.0	1.1	4.2	-.4	2.7	.9	1.7	.6	1.3	2.0
ERCOT	3.2	.6	4.2	4.8	4.0	7.1	.8	2.2	6.4	3.7
MAAC	3.1	.6	.1	1.7	2.5	-.6	-.6	-.9	.8	.7
MAIN	5.4	8.4	2.3	.0	-.6	-.0*	.1	-.3	-.1	1.7
MAPP – U.S.	1.1	.4	.9	1.9	3.7	-.0*	1.4	1.7	.6	1.3
NPCC – U.S.	5.0	-.2	2.2	2.8	-.2	2.0	1.3	-.5	-.2	1.4
SERC	1.9	3.7	2.1	4.3	1.1	2.2	.5	1.5	1.6	2.1
SPP	3.4	5.3	1.7	-.7	3.9	1.2	1.2	1.6	.9	2.0
WSCC – U.S.	3.2	2.8	3.3	1.8	.9	1.8	1.7	3.3	.6	2.2
NERC – U.S.	3.6	2.7	2.6	1.9	1.8	1.7	1.0	1.3	1.3	2.0
MAPP – CANADA	.0	2.6	1.4	.0	.0	1.9	2.3	.0	2.8	1.2
NPCC – CANADA	9.2	4.6	3.6	.2	1.6	1.6	1.7	3.0	2.8	3.1
WSCC – CANADA	15.1	4.0	5.0	3.2	1.9	1.6	1.2	5.7	3.4	4.5
NERC – CANADA	9.5	4.3	3.7	.8	1.6	1.6	1.6	3.3	2.9	3.3

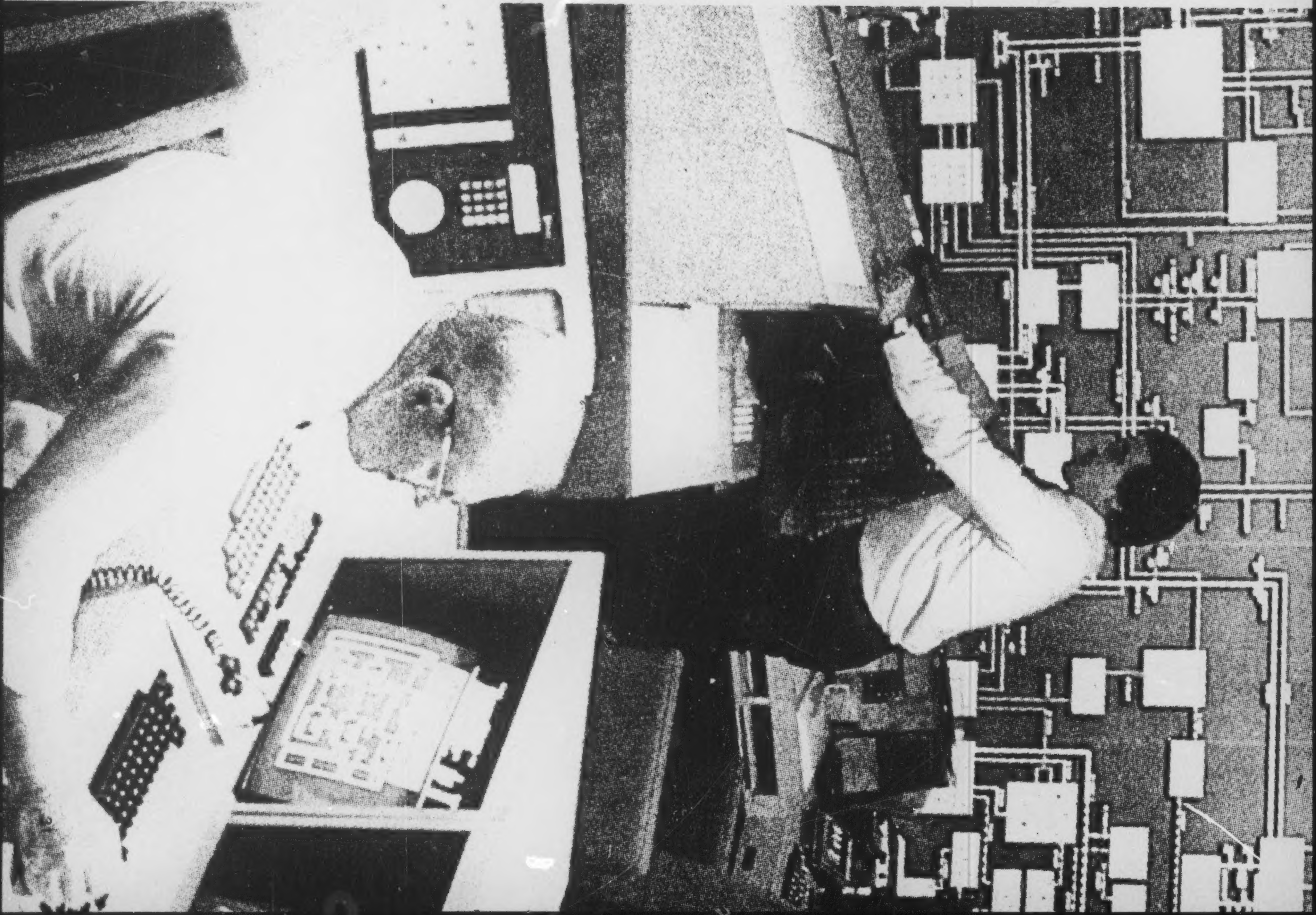
Winter (Percent)

Subregional Table 12

SUBREGION	1983/84–1984/85	1984/85–1985/86	1985/86–1986/87	1986/87–1987/88	1987/88–1988/89	1988/89–1989/90	1989/90–1990/91	1990/91–1991/92	1991/92 – 1992/93	1983/84 – 1992/93
CMNWLTH ED.	6.1	11.5	4.1	1.0	-1.4	.0	.0	.0	.0	2.3
EAST MISSOURI	-5.0	18.0	.0	.0	.1	.1	.4	.1	.0	1.4
SO. CENT. ILL.	11.7	.0	.0	.0	.0	.0	.2	.4	.2	1.3
WUM	6.1	4.1	2.4	-2.1	.1	-.2	.1	-1.9	-.5	.9
MAIN	5.4	8.4	2.3	.0	-.6	-.0*	.1	-.3	-.1	1.7
NEW YORK	1.6	3.2	.2	2.4	-.2	3.6	1.9	.1	.0	1.4
NEW ENGLAND	5.3	-.4	5.1	3.4	-.2	-.1	.3	-1.4	-.5	1.2
NPCC – U.S.	5.0	-.2	2.2	2.8	-.2	2.0	1.3	-.5	-.2	1.4
NEW BRUNSWICK	.0	4.8	.0	.0	.0	.0	8.1	.0	.0	1.4
ONTARIO	10.5	7.8	7.8	.3	3.3	3.2	1.0	3.1	3.0	4.4
QUÉBEC	9.0	1.8	.2	.1	.1	.1	1.8	3.2	2.9	2.1
NPCC – CANADA	9.2	4.6	3.6	.2	1.6	1.6	1.7	3.0	2.8	3.1
FLORIDA	3.6	5.5	1.5	2.7	1.8	2.1	-.1	1.7	-.2	2.1
SOUTHERN	-2.4	1.0	-1.9	9.8	1.0	7.8	-.6	1.9	4.9	2.3
TVA	3.1	3.8	3.7	3.5	.0	.0	.0	.0	.0	1.6
VACAR	2.8	4.3	4.0	2.6	1.3	.0	2.1	2.0	1.5	2.3
SERC	1.9	3.7	2.1	4.3	1.1	2.2	.5	1.5	1.6	2.1
GROUP A	4.2	2.6	.8	-.6	4.1	2.5	-.9	1.4	-2.0	1.3
GROUP B	5.0	8.2	4.4	-1.1	3.4	.4	5.3	-.4	5.2	3.3
GROUP C	.1	7.1	-.1	-.3	4.1	-.2	-.4	4.6	.7	1.7
SPP	3.4	5.3	1.7	-.7	3.9	1.2	1.2	1.6	.9	2.0
NWPP – U.S.	3.8	6.2	4.9	1.7	.6	1.0	2.6	3.2	.7	2.7
RMPA	5.8	.9	1.8	.9	.0	6.1	.1	.0	7.1	2.5
AZ-NM	10.2	7.6	4.2	5.6	3.3	2.7	-.0*	10.7	.8	4.9
CA-SNV	.7	-1.2	2.3	1.2	1.2	1.8	1.3	2.5	-.6	1.0
WSCC – U.S.	3.2	2.8	3.3	1.8	.9	1.8	1.7	3.3	.6	2.2

FOOTNOTE TO TABLE 12

"".0%" indicates either now growth or growth too small to show. "–.0%" indicates a decline too small to show.



Installed Generating Capability
by Principal Fuel Type

Installed Generating Capability data provide a breakdown by principal capacity and fuel types of the total installed generating capacity which is existing, presently under construction, or in various stages of planning; plus equipment upgradings, less deratings; less equipment removals.

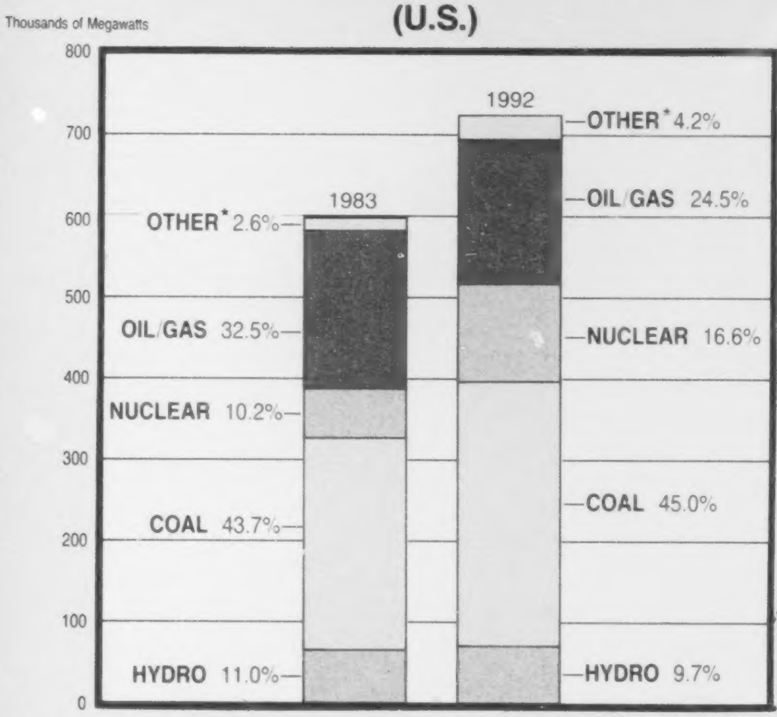
The realization of these Installed Generating Capability projections is contingent upon the scheduled completion of that generating capacity which is in various stages of construction, licensing design or planning.

The Projected Peak Demands as tabulated for the various NERC regions (Tables 1-2) may occur in different months within a given season. These Installed Generating Capability data of Table 13 correspond with the months of these Projected Peak Demands, and are based on seasonal ratings.

For tabulations of the total planned resources, which include scheduled capacity purchases and sales in addition to installed generating capability, refer to Tables 9-10.

NERC Installed Generating Capability by Principal Fuel Type

(U.S.)



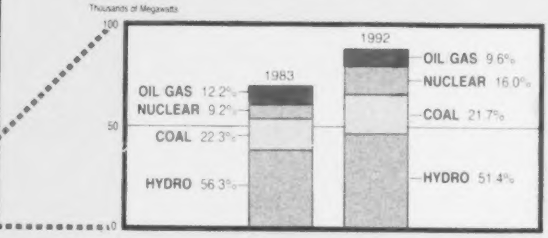
*Includes pumped storage.

Share of Actual Installed Capability 1982

	U.S.	Canada
Coal	43.0%	22.3%
Nuclear	9.5%	8.5%
Hydro	11.7%	56.4%
Oil/Gas	33.5%	12.8%
Other	2.4%*	0.0%

*Includes pumped storage

(Canada)



Total (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	89,919	91,045	94,112	97,542	100,296	103,420	105,248	105,454	106,776	107,186	107,736
ERCOT	43,452	43,974	45,128	45,079	46,949	49,412	50,734	55,018	55,426	57,223	59,443
MAAC	46,461	47,451	47,867	49,377	49,590	50,174	50,437	51,220	51,045	51,114	51,772
MAIN	40,578	41,924	43,922	46,950	49,174	50,284	50,294	50,306	50,334	50,382	50,202
MAPP – U.S.	27,331	28,039	29,067	29,117	29,565	29,829	30,678	31,339	31,362	32,412	32,454
NPCC – U.S.	50,563	50,564	51,705	53,483	54,672	56,604	56,485	56,608	58,282	58,394	58,208
SERC	121,533	125,103	128,714	132,485	136,243	141,650	144,805	148,856	149,680	151,724	153,117
SPP	58,236	60,098	62,579	65,849	67,769	67,859	68,900	70,239	71,824	72,647	73,967
WSCC – U.S.	108,069	109,494	116,921	121,824	122,784	126,396	127,690	129,460	131,063	135,593	136,833
NERC – U.S.	586,142	597,692	620,015	641,706	657,042	675,628	685,271	698,500	705,792	716,675	723,732
MAPP – CANADA	6,180	6,460	6,460	6,544	6,712	6,712	6,712	6,712	6,716	6,996	6,951
NPCC – CANADA	45,326	47,697	51,224	54,514	55,887	56,743	57,688	58,636	58,948	59,486	60,975
WSCC – CANADA	15,007	15,315	17,111	18,227	18,786	19,479	19,934	20,291	20,605	21,438	21,881
NERC – CANADA	66,513	69,472	74,795	79,285	81,385	82,934	84,334	85,639	86,269	87,920	89,807

Total (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	15,664	16,472	18,640	18,640	20,850	21,940	21,940	21,940	21,940	21,940	21,940
EAST MISSOURI	7,145	7,156	7,156	8,276	8,276	8,276	8,276	8,276	8,306	8,306	8,306
SO. CENT. ILL.	8,580	9,074	9,094	10,044	10,044	10,044	10,044	10,044	10,068	10,104	10,104
WUM	9,189	9,222	9,032	9,990	10,004	10,024	10,034	10,046	10,020	10,032	9,852
MAIN	40,578	41,924	43,922	46,950	49,174	50,284	50,294	50,306	50,334	50,382	50,202
NEW YORK	29,990	29,954	31,024	31,695	31,706	32,491	32,491	32,642	34,316	34,363	34,364
NEW ENGLAND	20,573	20,610	20,681	21,788	22,966	24,113	23,994	23,966	23,966	24,031	23,844
NPCC – U.S.	50,563	50,564	51,705	53,483	54,672	56,604	56,485	56,608	58,282	58,394	58,208
NEW BRUNSWICK	2,952	3,172	3,172	3,172	3,172	3,172	3,172	3,172	3,172	3,172	3,172
ONTARIO	24,042	24,619	25,458	27,554	28,884	29,698	30,612	31,526	31,559	31,592	32,506
QUÉBEC	18,332	19,906	22,594	23,788	23,831	23,873	23,904	23,938	24,217	24,722	25,297
NPCC – CANADA	45,326	47,697	51,224	54,514	55,887	56,743	57,688	58,636	58,948	59,486	60,975
FLORIDA	24,685	27,043	27,043	28,690	28,672	29,627	29,670	30,924	31,002	31,593	32,018
SOUTHERN	30,083	30,352	31,391	32,188	32,219	34,964	35,214	37,936	37,732	38,230	38,478
TVA	29,340	29,318	29,318	30,488	31,658	32,835	34,012	34,012	34,012	34,012	34,012
VACAR	37,425	38,390	40,962	41,119	43,694	44,224	45,909	45,984	46,934	47,889	48,609
SERC	121,533	125,103	128,714	132,485	136,243	141,650	144,805	148,856	149,680	151,724	153,117
GROUP A	23,758	25,190	27,137	27,728	28,764	28,740	29,120	29,951	30,751	30,492	30,927
GROUP B	20,569	20,428	20,691	22,357	23,197	23,329	23,325	23,851	24,576	25,028	25,592
GROUP C	13,969	14,480	14,751	15,764	15,808	15,790	16,455	16,437	16,497	17,127	17,448
SPP	58,236	60,098	62,579	65,849	67,769	67,859	68,900	70,239	71,824	72,647	73,967
NWPP – U.S.	43,288	42,747	45,371	46,202	48,334	50,080	50,330	50,564	51,049	53,607	54,193
RMPA	8,176	8,642	9,404	9,495	9,630	9,724	9,768	10,263	10,320	10,328	10,678
AZ-NM	12,192	12,329	13,409	14,887	15,495	16,258	16,465	16,545	16,820	18,183	18,795
CA-SNV	42,482	45,852	49,088	49,446	49,325	50,603	51,434	52,397	53,385	53,487	53,683
WSCC – U.S.[a]	108,069	109,494	116,921	121,824	122,784	126,396	127,690	129,460	131,063	135,593	136,833

Coal (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	74,470	76,141	76,554	79,176	80,690	82,552	82,552	82,552	83,038	83,418	84,048
ERCOT	10,656	11,056	11,056	11,056	11,776	12,961	14,338	17,517	18,080	19,208	19,950
MAAC	15,911	16,448	17,248	17,248	17,248	17,423	18,043	18,043	17,869	18,146	18,146
MAIN	26,390	27,075	27,095	28,031	28,031	28,041	28,041	28,041	28,041	28,041	27,910
MAPP – U.S.	16,783	17,609	18,679	18,679	19,142	19,330	20,122	20,797	20,797	21,839	21,839
NPCC – U.S.	5,449	5,429	6,540	7,939	8,430	9,153	9,955	10,766	11,466	11,466	11,466
SERC	58,354	60,658	62,974	65,771	66,219	67,996	68,496	71,127	70,974	73,189	74,584
SPP	20,664	22,657	22,937	25,222	26,684	26,590	27,666	27,622	29,082	29,762	32,062
WSCC – U.S.	23,550	24,293	26,086	27,910	28,576	29,757	30,372	32,013	33,328	35,059	35,904
NERC – U.S.	252,227	261,366	269,169	281,032	286,796	293,803	299,585	308,478	312,675	320,128	325,909
MAPP – CANADA	1,679	1,959	1,959	1,959	1,959	1,959	1,959	1,959	2,053	2,333	2,333
NPCC – CANADA	9,796	9,796	9,808	10,014	10,014	10,014	10,014	10,014	10,014	10,014	10,014
WSCC – CANADA	3,339	3,716	4,162	4,528	5,087	5,666	5,936	6,296	6,656	7,016	7,106
NERC – CANADA	14,814	15,471	15,929	16,501	17,060	17,639	17,909	18,269	18,723	19,363	19,453

Coal (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911
EAST MISSOURI	5,584	5,596	5,596	5,596	5,596	5,596	5,596	5,596	5,596	5,596	5,596
SO. CENT. ILL.	7,630	8,202	8,222	8,222	8,222	8,222	8,222	8,222	8,222	8,222	8,222
WUM	6,265	6,366	6,366	7,302	7,302	7,312	7,312	7,312	7,312	7,312	7,181
MAIN	26,390	27,075	27,095	28,031	28,031	28,041	28,041	28,041	28,041	28,041	27,910
NEW YORK	3,376	3,363	4,291	5,303	5,794	6,262	6,448	6,927	7,627	7,627	7,627
NEW ENGLAND	2,073	2,066	2,249	2,636	2,636	2,891	3,507	3,839	3,839	3,839	3,839
NPCC – U.S.	5,449	5,429	6,540	7,939	8,430	9,153	9,955	10,766	11,466	11,466	11,466
NEW BRUNSWICK	279	279	279	279	279	279	279	279	279	279	279
ONTARIO	9,517	9,517	9,529	9,735	9,735	9,735	9,735	9,735	9,735	9,735	9,735
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	9,796	9,796	9,808	10,014	10,014	10,014	10,014	10,014	10,014	10,014	10,014
FLORIDA	2,729	3,979	4,198	6,160	6,263	7,232	7,282	8,436	8,436	9,036	9,461
SOUTHERN	20,606	20,766	21,565	22,230	22,230	23,038	23,038	24,515	24,362	25,027	25,277
TVA	16,217	16,195	16,195	16,195	16,195	16,195	16,195	16,195	16,195	16,195	16,195
VACAR	18,802	19,718	21,016	21,186	21,531	21,531	21,981	21,981	21,981	22,931	23,651
SERC	58,354	60,658	62,974	65,771	66,219	67,996	68,496	71,127	70,974	73,189	74,584
GROUP A	3,603	4,934	4,934	5,681	6,283	6,189	6,635	6,541	7,341	7,341	8,141
GROUP B	7,250	7,250	7,250	8,838	9,678	9,678	9,678	9,728	10,328	10,378	11,528
GROUP C	9,811	10,473	10,753	10,703	10,723	10,723	11,353	11,353	11,413	12,043	12,393
SPP	20,664	22,657	22,937	25,222	26,684	26,590	27,666	27,622	29,082	29,762	32,062
NWPP – U.S.	8,776	9,025	9,725	10,375	11,275	11,275	11,474	11,694	12,164	12,184	12,704
RMPA	4,656	5,043	5,700	5,716	5,721	5,728	5,728	6,223	6,286	6,286	6,636
AZ-NM	6,238	6,361	6,521	7,190	7,299	7,801	8,008	8,151	8,426	9,616	10,111
CA-SNV	3,876	4,114	4,140	3,929	4,281	4,754	4,962	5,746	6,452	6,473	6,453
WSCC – U.S.	23,550	24,293	26,086	27,910	28,576	29,757	30,372	32,013	33,328	35,059	35,904

continued

Nuclear (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	4,576	4,528	7,586	8,106	8,926	10,056	11,730	11,730	12,367	12,367	12,367
ERCOT	0	0	1,150	1,150	2,300	3,550	3,550	4,800	4,800	4,800	4,800
MAAC	8,198	9,248	9,248	11,353	11,353	12,420	12,420	13,475	13,475	13,475	13,475
MAIN[b]	6,283	7,331	9,499	11,569	13,779	14,869	14,869	14,869	14,899	14,899	14,899
MAPP – U.S.	3,702	3,700	3,699	3,699	3,699	3,699	3,699	3,699	3,699	3,699	3,699
NPCC – U.S.	7,768	7,796	8,740	9,890	11,040	13,270	13,270	13,270	13,270	13,270	13,270
SERC	20,850	21,644	23,849	25,019	28,234	30,562	33,009	34,159	35,059	35,059	35,059
SPP	1,694	1,694	3,923	5,004	5,662	5,756	5,850	7,069	7,069	7,069	7,069
WSCC – U.S.	2,591	4,775	9,212	10,471	11,465	13,180	13,180	13,180	13,180	15,705	15,705
NERC – U.S.	55,662	60,716	76,906	86,261	96,458	107,362	111,577	116,251	117,818	120,343	120,343
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	5,658	6,394	7,812	9,625	10,922	11,703	12,584	13,465	13,465	13,465	14,346
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	5,658	6,394	7,812	9,625	10,922	11,703	12,584	13,465	13,465	13,465	14,346

Nuclear (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.[b]	4,778	5,826	7,994	7,994	10,204	11,294	11,294	11,294	11,294	11,294	11,294
EAST MISSOURI	0	0	0	1,120	1,120	1,120	1,120	1,120	1,150	1,150	1,150
SO. CENT. ILL.	0	0	0	950	950	950	950	950	950	950	950
WUM	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505
MAIN	6,283	7,331	9,499	11,569	13,779	14,869	14,869	14,869	14,899	14,899	14,899
NEW YORK	3,569	3,569	4,513	4,513	4,513	5,593	5,593	5,593	5,593	5,593	5,593
NEW ENGLAND	4,199	4,227	4,227	5,377	6,527	7,677	7,677	7,677	7,677	7,677	7,677
NPCC – U.S.	7,768	7,796	8,740	9,890	11,040	13,270	13,270	13,270	13,270	13,270	13,270
NEW BRUNSWICK	410	630	630	630	630	630	630	630	630	630	630
ONTARIO	5,248	5,764	6,545	8,358	9,655	10,436	11,317	12,198	12,198	12,198	13,079
QUÉBEC	0	0	637	637	637	637	637	637	637	637	637
NPCC – CANADA	5,658	6,394	7,812	9,625	10,922	11,703	12,584	13,465	13,465	13,465	14,346
FLORIDA	2,920	3,722	3,722	3,722	3,722	3,722	3,722	3,722	3,722	3,722	3,722
SOUTHERN	3,169	3,161	3,286	3,286	3,286	4,437	4,562	5,712	5,712	5,712	5,712
TVA	5,451	5,451	5,451	6,621	7,791	8,968	10,145	10,145	10,145	10,145	10,145
VACAR	9,310	9,310	11,390	11,390	13,435	13,435	14,580	14,580	15,480	15,480	15,480
SERC	20,850	21,644	23,849	25,019	28,234	30,562	33,009	34,159	35,059	35,059	35,059
GROUP A	1,694	1,694	3,923	3,923	4,581	4,675	4,769	5,988	5,988	5,988	5,988
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081
SPP	1,694	1,694	3,923	5,004	5,662	5,756	5,850	7,069	7,069	7,069	7,069
NWPP – U.S.	1,080	1,080	2,180	2,180	2,180	3,420	3,420	3,420	3,420	5,945	5,945
RMPA	200	200	200	200	275	275	275	275	275	275	275
AZ-NM	0	0	920	1,837	2,413	2,756	2,756	2,756	2,756	2,756	2,756
CA-SNV	1,311	3,495	5,912	6,254	6,597	6,729	6,729	6,729	6,729	6,729	6,729
WSCC – U.S.	2,591	4,775	9,212	10,471	11,465	13,180	13,180	13,180	13,180	15,705	15,705

Hydro[c] (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	561	609	609	609	609	609	609	609	609	609	609
ERCOT	230	230	230	230	230	233	233	233	233	233	233
MAAC	956	956	956	1,031	1,144	1,144	1,146	1,146	1,146	1,146	1,146
MAIN	573	572	574	574	575	575	575	576	576	577	577
MAPP – U.S.	3,026	2,987	2,911	2,921	2,910	2,904	2,931	2,931	2,933	2,933	2,933
NPCC – U.S.	5,258	5,292	5,337	5,357	5,374	5,403	5,426	5,442	5,447	5,494	5,495
SERC	10,049	10,164	10,319	10,645	10,747	10,747	10,747	10,812	10,812	10,812	10,882
SPP	2,346	2,367	2,467	2,547	2,547	2,547	2,547	2,547	2,547	2,547	2,547
WSCC – U.S.	45,317[c]	42,423	42,760	44,512	44,875	45,197	45,602	45,660	45,766	45,823	45,878
NERC – U.S.	68,316	65,600	66,163	68,426	69,011	69,359	69,816	69,956	70,069	70,174	70,300
MAPP – CANADA	4,178	4,178	4,178	4,262	4,430	4,430	4,430	4,430	4,430	4,430	4,430
NPCC – CANADA	24,220	25,822	27,894	29,096	29,139	29,181	29,212	29,246	29,525	30,030	29,572
WSCC – CANADA	9,139	9,139	10,489	10,939	10,939	11,053	11,238	11,238	11,238	11,838	12,191
NERC – CANADA	37,537	39,139	42,561	44,297	44,508	44,664	44,880	44,914	45,193	46,298	46,193

Hydro[c] (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	331	331	331	331	331	331	331	331	331	331	331
SC. CENT. ILL.	2	2	2	2	2	2	2	2	2	2	2
WUM	240	239	241	241	242	242	242	243	243	244	244
MAIN	573	572	574	574	575	575	575	576	576	577	577
NEW YORK	3,972	3,990	4,020	4,028	4,039	4,068	4,091	4,107	4,112	4,159	4,160
NEW ENGLAND	1,286	1,302	1,317	1,329	1,335	1,335	1,335	1,335	1,335	1,335	1,335
NPCC – U.S.	5,258	5,292	5,337	5,357	5,374	5,403	5,426	5,442	5,447	5,494	5,495
NEW BRUNSWICK	846	846	846	846	846	846	846	846	846	846	846
ONTARIO	6,107	6,135	6,156	6,164	6,164	6,164	6,164	6,164	6,164	6,164	6,164
QUÉBEC	17,267	18,841	20,892	22,086	22,129	22,171	22,202	22,236	22,515	23,020	22,562
NPCC – CANADA	24,220	25,822	27,894	29,096	29,139	29,181	29,212	29,246	29,525	30,030	29,572
FLORIDA	36	36	36	47	47	47	47	47	47	47	47
SOUTHERN	3,225	3,342	3,457	3,622	3,724	3,724	3,724	3,789	3,789	3,789	3,859
TVA	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306
VACAR	2,482	2,480	2,520	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670
SERC	10,049	10,164	10,319	10,645	10,747	10,747	10,747	10,812	10,812	10,812	10,882
GROUP A	69	69	69	69	69	69	69	69	69	69	69
GROUP B	2,261	2,282	2,382	2,462	2,462	2,462	2,462	2,462	2,462	2,462	2,462
GROUP C	16	16	16	16	16	16	16	16	16	16	16
SPP	2,346	2,367	2,467	2,547	2,547	2,547	2,547	2,547	2,547	2,547	2,547
NWPP – U.S.	31,232[c]	30,446	30,930	31,091	32,322	32,789	32,825	32,824	32,824	32,822	32,823
RMPA	2,189	2,189	2,211	2,286	2,341	2,428	2,472	2,472	2,474	2,474	2,474
AZ-NM	662	676	676	676	676	676	676	676	676	676	676
CA-SNV	9,316[c]	8,965	9,285	9,356	9,536	9,763	10,127	10,187	10,294	10,354	10,412
WSCC – U.S.	45,317	42,423	42,760	44,512	44,875	45,197	45,602	45,660	45,766	45,823	45,878

Pumped Storage (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	2,767	2,767	2,767	2,767	3,187	3,607	3,607	3,607	3,607	3,607	3,607
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280
MAIN	300	300	300	300	300	300	300	300	300	300	300
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	3,613	3,613	3,613
SERC	2,909	2,909	2,909	2,909	3,434	4,806	5,031	5,106	5,106	5,106	5,106
SPP	260	260	260	260	260	260	260	260	260	260	260
WSCC – U.S.	2,030	2,834	2,935	2,934	2,934	2,932	2,950	2,871	2,871	2,871	3,021
NERC – U.S.	12,159	12,963	13,064	13,063	14,008	15,798	16,041	16,037	17,037	17,037	17,187
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	633
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	633

Pumped Storage (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	300	300	300	300	300	300	300	300	300	300	300
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	300	300	300	300	300	300	300	300	300	300	300
NEW YORK	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	2,000	2,000	2,000
NEW ENGLAND	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613
NPCC – U.S.	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	3,613	3,613	3,613
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	633
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	633
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	487	487	487	487	487	1,334	1,484	1,484	1,484	1,484	1,484
TVA	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
VACAR	1,122	1,122	1,122	1,122	1,647	2,172	2,247	2,322	2,322	2,322	2,322
SERC	2,909	2,909	2,909	2,909	3,434	4,806	5,031	5,106	5,106	5,106	5,106
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	260	260	260	260	260	260	260	260	260	260	260
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	260	260	260	260	260	260	260	260	260	260	260
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	190	262	362	362	362	362	362	362	362	362	362
AZ-NM	137	137	137	137	137	137	137	137	137	137	287
CA-SNV	1,703	2,399	2,436	2,435	2,435	2,433	2,451	2,372	2,372	2,372	2,372
WSCC – U.S.	2,030	2,834	2,935	2,934	2,934	2,932	2,950	2,871	2,871	2,871	3,021

Geothermal (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	909	1,240	1,486	1,702	1,979	2,066	2,305	2,729	2,953	3,113	3,163
NERC – U.S.	909	1,240	1,486	1,702	1,979	2,066	2,305	2,729	2,953	3,113	3,163
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Geothermal (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	20	20	20	20	20	20	20	20	20
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	909	1,240	1,466	1,682	1,959	2,046	2,285	2,709	2,933	3,093	3,143
WSCC – U.S.	909	1,240	1,486	1,702	1,979	2,066	2,305	2,729	2,953	3,113	3,163

Oil – Steam (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	3,948	3,657	3,253	3,253	3,253	3,253	3,407	3,613	3,812	3,767	3,687
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	12,300	11,703	11,320	11,079	11,079	10,523	10,167	9,895	9,895	9,687	9,948
MAIN	3,466	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396
MAPP – U.S.	503	135	136	135	135	135	135	135	135	135	135
NPCC – U.S.	17,551	17,414	16,368	15,979	15,488	14,441	13,516	12,866	12,866	12,866	12,682
SERC	10,448	10,334	9,488	9,318	8,973	8,973	8,973	8,973	8,973	8,949	8,908
SPP	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	456	456	456	456	456	456	456	456	456	456	456
NERC – U.S.	48,672	47,095	44,417	43,616	42,780	41,177	40,050	39,334	39,533	39,256	39,212
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253

Oil – Steam (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698
EAST MISSOURI	265	264	264	264	264	264	264	264	264	264	264
SO. CENT. ILL.	503	434	434	434	434	434	434	434	434	434	434
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	3,466	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396
NEW YORK	8,527	8,463	7,599	7,599	7,108	6,316	6,126	5,836	5,836	5,836	5,836
NEW ENGLAND	9,024	8,951	8,769	8,380	8,380	8,125	7,390	7,030	7,030	7,030	6,846
NPCC – U.S.	17,551	17,414	16,368	15,979	15,488	14,441	13,516	12,866	12,866	12,866	12,682
NEW BRUNSWICK	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391
ONTARIO	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232
QUÉBEC	630	630	630	630	630	630	630	630	630	630	630
NPCC – CANADA	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253
FLORIDA	7,981	7,867	7,867	7,867	7,867	7,867	7,867	7,867	7,867	7,867	7,867
SOUTHERN	228	228	228	228	228	228	228	228	228	204	163
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	2,239	2,239	1,393	1,223	878	878	878	878	878	878	878
SERC	10,448	10,334	9,488	9,318	8,973	8,973	8,973	8,973	8,973	8,949	8,908
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	136	136	136	136	136	136	136	136	136	136	136
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	320	320	320	320	320	320	320	320	320	320	320
WSCC – U.S.	456	456	456	456	456	456	456	456	456	456	456

Oil – Combustion Turbine[d] (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	2,104	2,088	2,086	2,088	2,088	2,088	2,088	2,088	2,088	2,163	2,163
ERCOT	47	47	47	41	41	41	41	41	41	41	41
MAAC	6,902	6,902	6,901	6,425	6,425	6,423	6,420	6,420	6,445	6,445	6,442
MAIN[e]	1,406	1,236	1,236	1,236	1,236	1,236	1,236	1,236	1,260	1,296	1,296
MAPP – U.S.	2,723	2,450	2,530	2,575	2,576	2,581	2,631	2,621	2,642	2,659	2,701
NPCC – U.S.	3,569	3,598	3,598	3,523	3,523	3,520	3,520	3,520	3,520	3,585	3,585
SERC	7,540	7,221	7,221	7,175	7,159	7,158	7,133	7,163	7,193	7,171	7,140
SPP	1,543	1,534	1,534	1,532	1,532	1,532	1,548	1,848	2,048	2,248	2,248
WSCC – U.S.	833	840	840	840	840	840	840	840	840	840	840
NERC – U.S.	26,667	25,916	25,995	25,435	25,420	25,419	25,457	25,777	26,077	26,448	26,456
MAPP – CANADA	22	22	22	22	22	22	22	22	22	22	22
NPCC – CANADA	811	844	869	905	905	905	905	905	905	905	1,305
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	833	866	891	927	927	927	927	927	927	927	1,327

Oil – Combustion Turbine[d] (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.[e]	600	438	438	438	438	438	438	438	438	438	438
EAST MISSOURI	349	349	349	349	349	349	349	349	349	349	349
SO. CENT. ILL.	102	93	93	93	93	93	93	93	117	153	153
WUM	355	356	356	356	356	356	356	356	356	356	356
MAIN	1,406	1,236	1,236	1,236	1,236	1,236	1,236	1,236	1,260	1,296	1,296
NEW YORK	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415
NEW ENGLAND	1,154	1,183	1,183	1,108	1,108	1,105	1,105	1,105	1,105	1,170	1,170
NPCC – U.S.	3,569	3,598	3,598	3,523	3,523	3,520	3,520	3,520	3,520	3,585	3,585
NEW BRUNSWICK	26	26	26	26	26	26	26	26	26	26	26
ONTARIO	350	383	408	444	444	444	444	444	444	444	444
QUÉBEC	435	435	435	435	435	435	435	435	435	435	835
NPCC – CANADA	811	844	869	905	905	905	905	905	905	905	1,305
FLORIDA	2,648	2,693	2,693	2,680	2,680	2,679	2,679	2,679	2,679	2,670	2,670
SOUTHERN	1,214	1,214	1,214	1,181	1,165	1,165	1,140	1,170	1,200	1,187	1,156
TVA	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066
VACAR	1,612	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248
SERC	7,540	7,221	7,221	7,175	7,159	7,158	7,133	7,163	7,193	7,171	7,140
GROUP A	281	281	281	281	281	281	281	281	281	281	281
GROUP B	67	67	67	65	65	65	61	361	561	761	761
GROUP C	1,195	1,186	1,186	1,186	1,186	1,186	1,206	1,206	1,206	1,206	1,206
SPP	1,543	1,534	1,534	1,532	1,532	1,532	1,548	1,848	2,048	2,248	2,248
NWPP – U.S.	15	15	15	15	15	15	15	15	15	15	15
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	357	357	357	357	357	357	357	357	357	357	357
CA-SNV	461	463	468	468	468	468	468	468	468	468	468
WSCC – U.S.	833	840	840	840	840	840	840	840	840	840	840

Oil – Combined Cycle (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	392	226	226	226	226	226	226	226	226	226	226
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	173	111	111	111	111	111	111	111	111	111	111
NPCC – U.S.	380	364	364	364	364	364	364	364	364	364	364
SERC	0	0	0	0	0	0	0	100	100	100	100
SPP	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	513	513	513	513	513	513	513	513	513	513	513
NERC – U.S.	1,458	1,214	1,214	1,214	1,214	1,214	1,214	1,314	1,314	1,314	1,314
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Oil – Combined Cycle (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	380	364	364	364	364	364	364	364	364	364	364
NPCC – U.S.	380	364	364	364	364	364	364	364	364	364	364
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	100	100	100	100
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	100	100	100	100
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	513	513	513	513	513	513	513	513	513	513	513
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	513	513	513	513	513	513	513	513	513	513	513

Gas – Steam (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	143	29	29	317	317	29	29	29	29	29	29
ERCOT	25,533	25,540	25,544	25,501	25,501	25,501	25,421	25,276	25,121	24,590	23,818
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	209	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	583	592	592	592	592	592	592	592	592	592	592
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	13,016	12,781	12,766	12,739	12,739	12,679	12,655	12,655	12,655	12,521	11,613
WSCC – U.S.	284	284	284	284	284	284	284	284	284	284	284
NERC – U.S.	39,768	39,226	39,215	39,433	39,433	39,085	38,981	38,836	38,681	38,016	36,336
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	588	588	588	588	588	588	588	588	588	588	588
WSCC – CANADA	1,056	987	987	987	987	987	987	987	987	889	889
NERC – CANADA	1,644	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,477	1,477

Gas – Steam (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	583	592	592	592	592	592	592	592	592	592	592
NPCC – U.S.	583	592	592	592	592	592	592	592	592	592	592
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	588	588	588	588	588	588	588	588	588	588	588
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	588	588	588	588	588	588	588	588	588	588	588
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	4,978	4,989	4,929	4,902	4,902	4,878	4,854	4,854	4,854	4,720	4,435
GROUP B	7,838	7,732	7,777	7,777	7,777	7,741	7,741	7,741	7,741	7,741	7,118
GROUP C	200	60	60	60	60	60	60	60	60	60	60
SPP	13,016	12,781	12,766	12,739	12,739	12,679	12,655	12,655	12,655	12,521	11,613
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	284	284	284	284	284	284	284	284	284	284	284
WSCC – U.S.	284	284	284	284	284	284	284	284	284	284	284

Gas – Combustion Turbine[d] (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	958	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
ERCOT	324	439	439	439	439	439	439	439	439	439	439
MAAC	474	474	474	474	474	474	474	474	448	448	448
MAIN	67	67	67	67	67	67	67	67	67	67	67
MAPP – U.S.	198	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	162	233	233	233	233	233	233	233	233	233	233
SERC	30	30	30	30	30	30	30	30	30	30	30
SPP	248	248	248	248	248	248	248	248	248	248	189
WSCC – U.S.	266	266	266	266	316	316	316	316	316	316	378
NERC – U.S.	2,747	2,757	2,757	2,757	2,807	2,807	2,807	2,807	2,781	2,781	2,784
MAPP – CANADA	115	115	115	115	115	115	115	115	115	115	70
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	307	307	307	307	307	307	307	304	258	229	229
NERC – CANADA	422	422	422	422	422	422	422	419	373	344	299

Gas – Combustion Turbine[d] (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	37	37	37	37	37	37	37	37	37	37	37
SO. CENT. ILL.	30	30	30	30	30	30	30	30	30	30	30
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	67	67	67	67	67	67	67	67	67	67	67
NEW YORK	45	45	45	45	45	45	45	45	45	45	45
NEW ENGLAND	137	188	188	188	188	188	188	188	188	188	188
NPCC – U.S.	162	233	233	233	233	233	233	233	233	233	233
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	21	21	21	21	21	21	21	21	21	21	21
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	9	9	9	9	9	9	9	9	9	9	9
SERC	30	30	30	30	30	30	30	30	30	30	30
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	234	234	234	234	234	234	234	234	234	234	175
GROUP C	14	14	14	14	14	14	14	14	14	14	14
SPP	248	248	248	248	248	248	248	248	248	248	189
NWPP – U.S.	168	168	168	168	168	168	168	168	168	168	168
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	98	98	98	98	148	148	148	148	148	148	210
WSCC – U.S.	266	266	266	266	316	316	316	316	316	316	378

continued

Gas – Combined Cycle (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	162	162	162	162	162	162	162	162	162	162	162
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	99	99	99	99	99	99	99	99	99	99	99
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	510	514	514	514	514	514	514	514	459	459	459
WSCC – U.S.	10	10	10	10	10	10	10	10	10	10	10
NERC – U.S.	781	785	785	785	785	785	785	785	730	730	730
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Gas – Combined Cycle (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	99	99	99	99	99	99	99	99	99	99	99
NPCC – U.S.	99	99	99	99	99	99	99	99	99	99	99
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	510	514	514	514	514	514	514	514	459	459	459
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	510	514	514	514	514	514	514	514	459	459	459
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	10	10	10	10	10	10	10	10	10	10	10
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	10	10	10	10	10	10	10	10	10	10	10

Dual-Fueled' (Oil/Gas) – Steam (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	744	675	483	483	483	483	483	483	452	452	452
MAPP – U.S.	0	417	371	367	362	412	398	398	398	389	389
NPCC – U.S.	6,001	6,024	6,024	5,625	5,625	5,625	5,596	5,522	5,461	5,461	5,461
SERC	8,160	8,494	8,275	7,962	7,786	7,725	7,718	7,718	7,615	7,485	7,485
SPP	16,712	16,646	16,542	16,395	16,151	16,126	16,005	15,693	15,673	15,548	15,301
WSCC – U.S.	25,044	25,044	24,962	24,456	22,785	22,564	22,341	21,918	21,604	21,257	20,831
NERC – U.S.	62,153	62,792	62,149	60,780	58,684	58,427	58,033	57,224	56,695	56,084	55,411
MAPP – CANADA	186	186	186	186	186	186	186	186	96	96	96
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	900	900	900	900	900	900	900	900	900	900	900
NERC – CANADA	1,086	1,086	1,086	1,086	1,086	1,086	1,086	1,086	996	996	996

Dual-Fueled' (Oil/Gas) – Steam (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	266	266	266	266	266	266	266	266	266	266	266
SO. CENT. ILL.	150	150	150	150	150	150	150	150	150	150	150
WUM	328	259	67	67	67	67	67	67	36	36	36
MAIN	744	675	483	483	483	483	483	483	452	452	452
NEW YORK	6,001	6,024	6,024	5,625	5,625	5,625	5,596	5,522	5,461	5,461	5,461
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	6,001	6,024	6,024	5,625	5,625	5,625	5,596	5,522	5,461	5,461	5,461
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	6,177	6,511	6,292	5,979	5,858	5,858	5,851	5,851	5,829	5,829	5,829
SOUTHERN	1,071	1,071	1,071	1,071	1,016	955	955	955	874	744	744
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	912	912	912	912	912	912	912	912	912	912	912
SERC	8,160	8,494	8,275	7,962	7,786	7,725	7,718	7,718	7,615	7,485	7,485
GROUP A	12,896	12,896	12,674	12,545	12,321	12,321	12,185	11,891	11,891	11,766	11,686
GROUP B	1,781	1,781	1,899	1,899	1,899	1,892	1,892	1,892	1,872	1,872	1,734
GROUP C	2,035	1,969	1,969	1,951	1,931	1,913	1,928	1,910	1,910	1,910	1,881
SPP	16,712	16,646	16,542	16,395	16,151	16,126	16,005	15,693	15,673	15,548	15,301
NWPP – U.S.	617	617	617	617	617	617	617	617	617	617	617
RMPA	354	354	337	337	337	337	337	337	329	312	312
AZ-NM	2,866	2,866	2,866	2,758	2,681	2,599	2,599	2,536	2,536	2,536	2,503
CA-SNV	21,207	21,207	21,142	20,744	19,150	19,011	18,788	18,428	18,122	17,792	17,399
WSCC – U.S.	25,044	25,044	24,962	24,456	22,785	22,564	22,341	21,918	21,604	21,257	20,831

Dual-Fueled[f] (Oil/Gas) – Combustion Turbine[d] (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008
MAAC	108	108	108	108	108	108	108	108	108	108	108
MAIN[e]	1,349	1,272	1,272	1,282	1,282	1,282	1,282	1,282	1,282	1,282	1,228
MAPP – U.S.	0	554	554	554	554	581	575	571	571	571	571
NPCC – U.S.	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085
SERC	2,655	2,696	2,696	2,696	2,696	2,683	2,683	2,683	2,733	2,733	2,733
SPP	670	824	815	815	859	859	859	859	859	859	845
WSCC – U.S.	3,967	3,922	4,170	4,170	4,175	4,175	4,175	4,175	4,175	4,175	4,175
NERC – U.S.	10,842	11,469	11,708	11,718	11,767	11,781	11,775	11,771	11,821	11,821	11,753
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	266	266	266	266	266	266	266	266	266	266	266
NERC – CANADA	266	266	266	266	266	266	266	266	266	266	266

Dual-Fueled[f] (Oil/Gas) – Combustion Turbine[d] (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.[e]	677	599	599	599	599	599	599	599	599	599	599
EAST MISSOURI	13	13	13	13	13	13	13	13	13	13	13
SO. CENT. ILL.	163	163	163	163	163	163	163	163	163	163	163
WUM	496	497	497	507	507	507	507	507	507	507	453
MAIN	1,349	1,272	1,272	1,282	1,282	1,282	1,282	1,282	1,282	1,282	1,228
NEW YORK	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	1,722	1,763	1,763	1,763	1,763	1,750	1,750	1,750	1,750	1,750	1,750
SOUTHERN	62	62	62	62	62	62	62	62	62	62	62
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	871	871	871	871	871	871	871	871	921	921	921
SERC	2,655	2,696	2,696	2,696	2,696	2,683	2,683	2,683	2,733	2,733	2,733
GROUP A	34	124	124	124	124	124	124	124	124	124	124
GROUP B	18	18	18	18	18	18	18	18	18	18	4
GROUP C	616	682	673	673	717	717	717	717	717	717	717
SPP	670	824	815	815	859	859	859	859	859	859	845
NWPP – U.S.	684	682	932	932	930	932	932	932	932	932	932
RMPA	587	587	587	587	587	587	587	587	587	587	587
AZ-NM	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137
CA-SNV	1,550	1,525	1,516	1,516	1,521	1,521	1,521	1,521	1,521	1,521	1,521
WSCC – U.S.	3,967	3,922	4,170	4,170	4,175	4,175	4,175	4,175	4,175	4,175	4,175

continued

Dual-Fueled[1] (Oil/Gas) – Combined Cycle (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	332	332	332	332	332	332	332	332	332	332	332
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	62	62	62	62	62	62	62	62	62	62
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	500	500	500	500	500	500	500	500	500	500	500
SPP	280	280	280	280	280	280	280	280	280	280	280
WSCC – U.S.	1,882	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917
NERC – U.S.	2,994	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Dual-Fueled[1] (Oil/Gas) – Combined Cycle (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	472	472	472	472	472	472	472	472	472	472	472
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	28	26	28	28	28	28	28	28	28	28	28
SERC	500	500	500	500	500	500	500	500	500	500	500
GROUP A	203	203	203	203	203	203	203	203	203	203	203
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	77	77	77	77	77	77	77	77	77	77	77
SPP	280	280	280	280	280	280	280	280	280	280	280
NWPP – U.S.	500	493	500	500	493	500	500	500	500	500	500
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	272	272	272	272	272	272	272	272	272	272	272
CA-SNV	1,110	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152
WSCC - U.S.	1,882	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917

continued

Other – (MW)

Regional Table 13

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT[g]	0	0	0	0	0	25	50	50	50	1,250	3,500
MAAC[h]	0	0	0	47	147	47	47	47	47	47	447
MAIN[k]	0	0	0	12	25	35	45	56	61	72	77
MAPP – U.S.[l]	14	14	14	14	14	14	14	14	14	14	14
NPCC – U.S.	25	25	112	184	206	206	216	236	266	266	263
SERC[n]	38	453	453	460	465	470	485	485	585	590	590
SPP	293	293	293	293	293	468	468	644	644	846	1,094
WSCC – U.S.	417	677	1,024	1,383	1,659	2,189	2,429	2,578	2,850	3,254	3,758
NERC – U.S.	787	1,462	1,896	2,393	2,809	3,454	3,754	4,110	4,517	6,339	9,743
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA[m]	0	0	0	33	66	99	132	165	198	231	264
WSCC – CANADA	0	0	0	300	300	300	300	300	300	300	300
NERC – CANADA	0	0	0	333	366	399	432	465	498	531	564

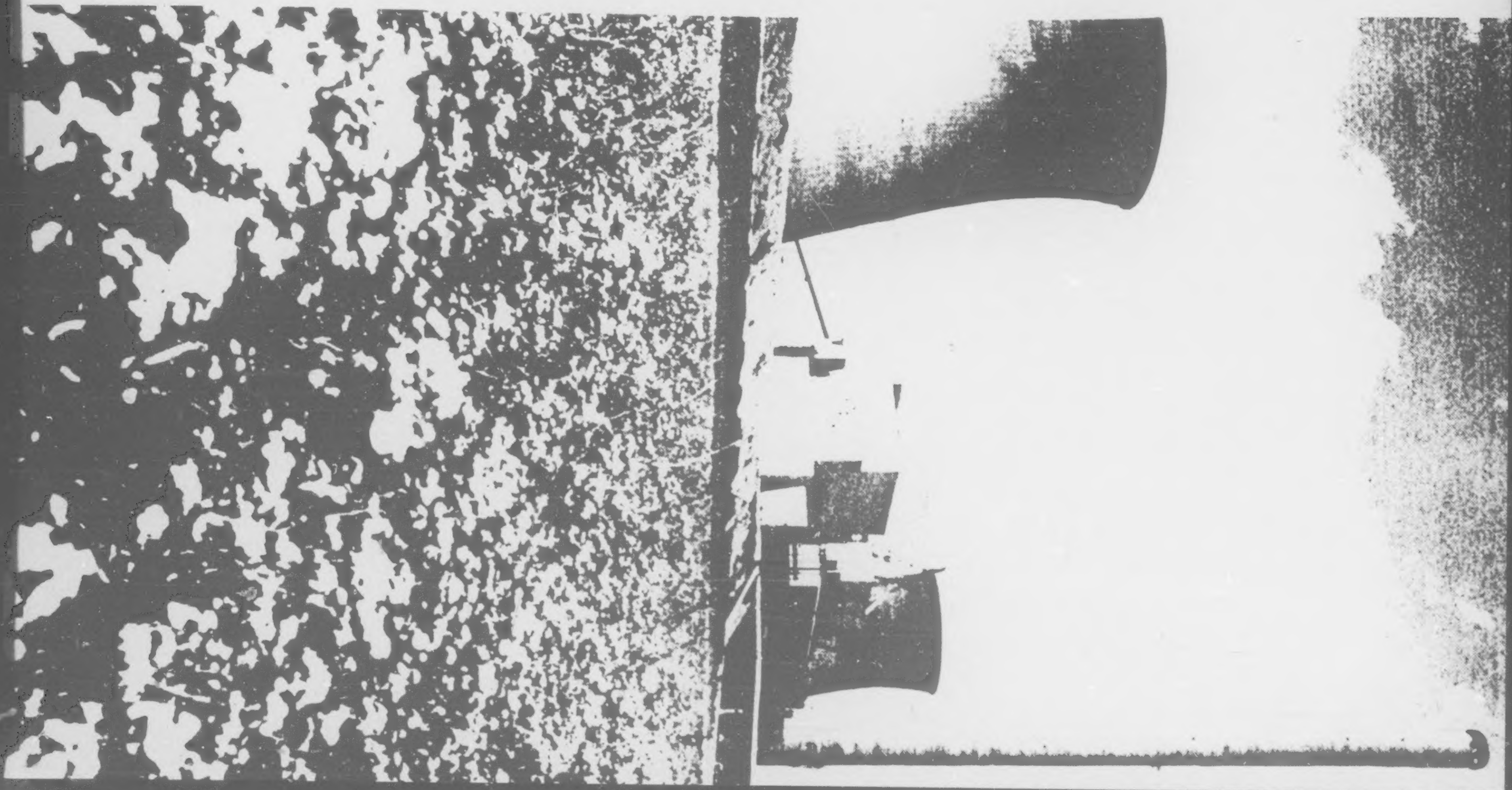
Other – (MW)

Subregional Table 13

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM[k]	0	0	0	12	25	35	45	56	61	72	77
MAIN	0	0	0	12	25	35	45	56	61	72	77
NEW YORK	0	0	32	82	82	82	92	112	142	142	142
NEW ENGLAND	25	25	80	102	124	124	124	124	124	124	121
NPCC – U.S.	25	25	112	184	206	206	216	236	266	266	263
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO[m]	0	0	0	33	66	99	132	165	198	231	264
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	33	66	99	132	165	198	231	264
FLORIDA	0	0	0	0	0	0	0	0	100	100	100
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR[n]	38	453	453	460	465	470	485	485	485	490	490
SERC	38	453	453	460	465	470	485	485	585	590	590
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	290	290	290	290	290	465	465	641	641	843	1,091
GROUP C	3	3	3	3	3	3	3	3	3	3	3
SPP	293	293	293	293	293	468	468	644	644	846	1,094
NWPP – U.S.	80	85	148	168	178	208	223	238	253	268	333
RMPA	0	7	7	7	7	7	7	7	7	32	32
AZ-NM	0	0	0	0	0	0	0	0	0	173	173
CA-SNV	337	585	869	1,208	1,474	1,974	2,199	2,333	2,590	2,781	3,220
WSCC – U.S.	417	677	1,024	1,383	1,659	2,189	2,429	2,578	2,850	3,254	3,758

FOOTNOTES TO TABLE 13

a/ Since the subregional peak demands may occur in different months than the coincident total WSCC (U.S.) peak demand, the sum of the individual subregional installed capabilities based on those peak demands may not equal the WSCC (U.S.) total.
b/ 197 MW of inoperable nuclear capability is not included.
c/ Adverse hydro is assumed for forecast years. Data for actual year can be greater than for forecast years if median hydro occurred.
d/ Includes diesel.
e/ 240 MW of inoperable combustion turbine capability is not included in the years 1983 through 1992.
f/ This category is considered to include only those units which can just as easily burn either oil or gas, without limitation, and in which the choice of fuel is determined solely on the relative economics or availability of fuel.
g/ Refuse capability.
h/ 47 MW waste facility scheduled for 2/1/85.
i/ Includes 100 MW non-utility generation for summer 1986 only.
j/ Includes 400 MW undesignated base load unit scheduled for 1/1/92.
k/ Small, cogeneration, and wood-fired steam units.
l/ 14 MW in each year is a steam unit using wood fuel.
m/ Cogeneration.
n/ Cogeneration and combustion turbines having dual fuel capability of oil and propane.



Installed Generating Capability
by Region

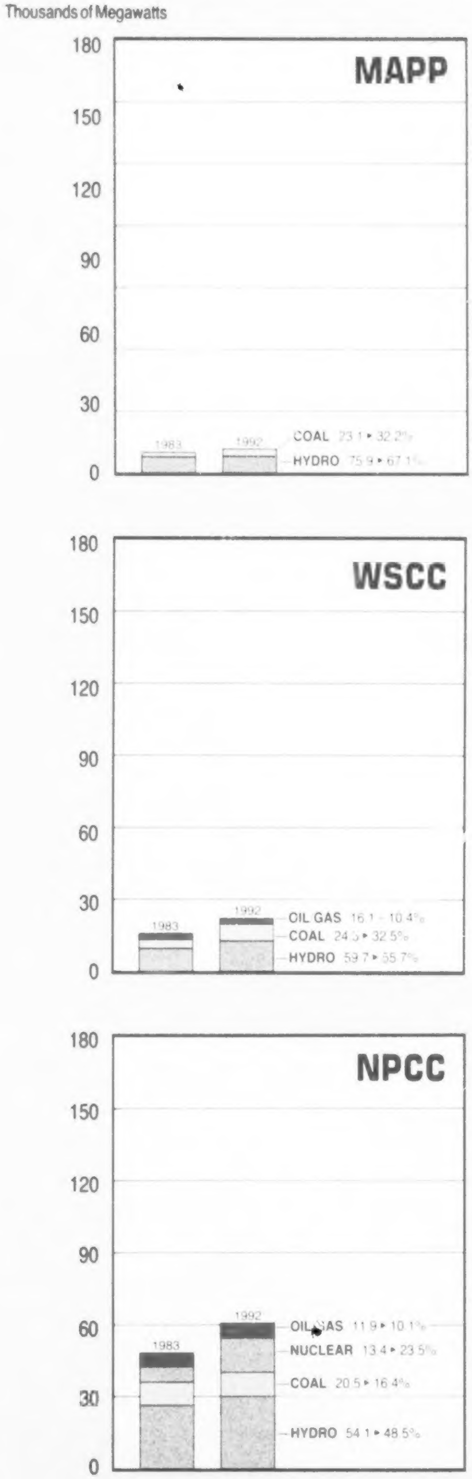
(Canada)*

Installed Generating Capability data provide a regional breakdown by principal capacity and fuel types of the total installed generating capacity which is existing, presently under construction, or in various stages of planning; plus equipment upgradings, less deratings; less equipment removals.

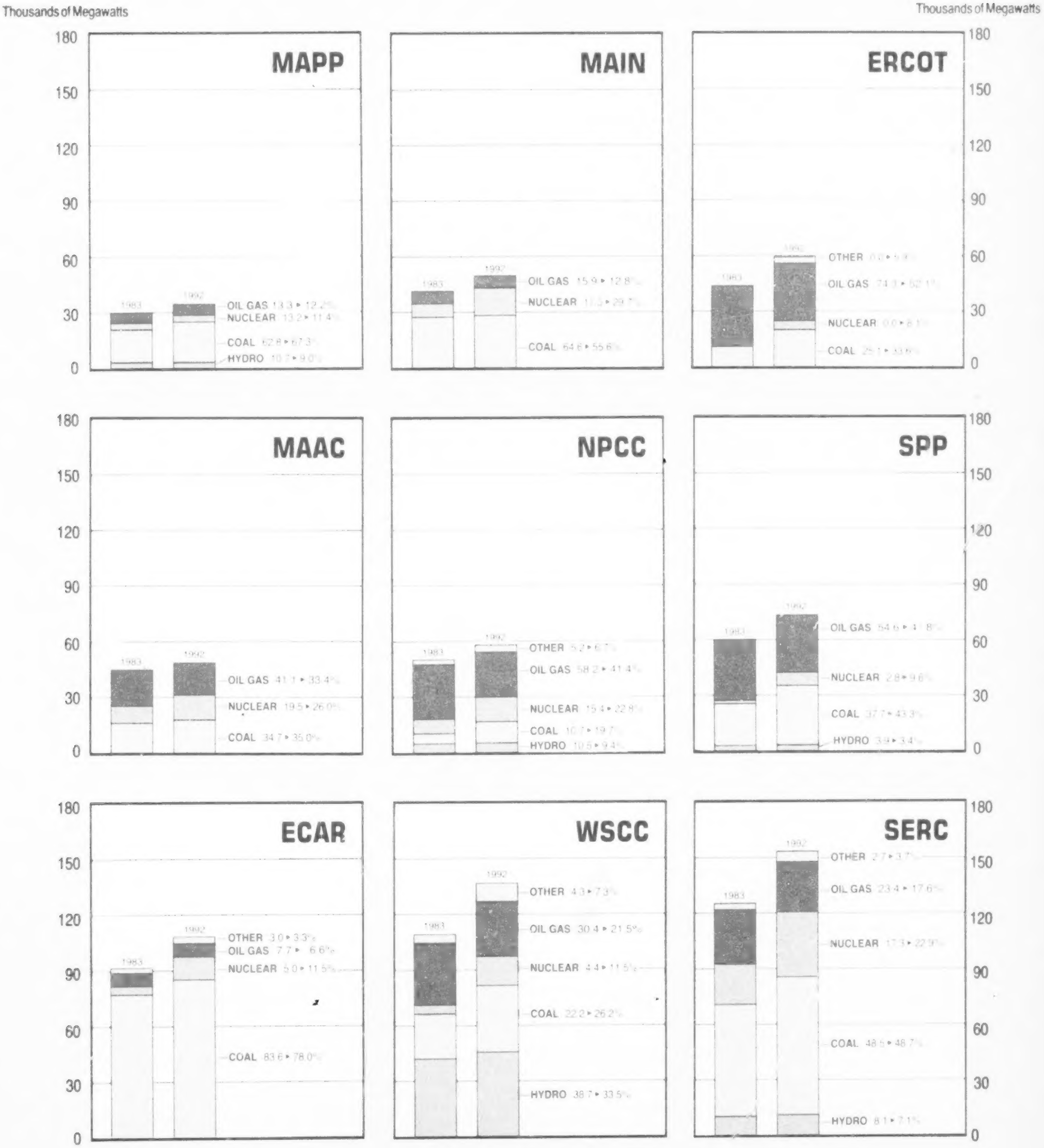
The realization of these Installed Generating Capability projections is contingent upon the scheduled completion of that generating capacity which is in various stages of construction, licensing, design or planning.

The Projected Peak Demands as tabulated for the various NERC regions (Tables 1-2) may occur in different months within a given season. These Installed Generating Capability data of Table 14 correspond with the months of these Projected Peak Demands, and are based on seasonal ratings.

For tabulations of the total planned resources, which include scheduled capacity purchases and sales in addition to installed generating capability, refer to Tables 9-10.



(U.S.)*



*The difference between the sum of the parts and 100% represents the share by sources not shown.

NERC-U.S. (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	252,227	261,366	269,169	281,032	286,796	293,803	299,585	308,478	312,675	320,128	325,909
NUCLEAR	55,662	60,716	76,906	86,261	96,458	107,362	111,577	116,251	117,818	120,343	120,343
HYDRO	68,316	65,600	66,163	68,426	69,011	69,359	69,816	69,956	70,069	70,174	70,300
PUMPED STORAGE	12,159	12,963	13,064	13,063	14,008	15,798	16,041	16,037	17,037	17,037	17,187
GEOTHERMAL	909	1,240	1,486	1,702	1,979	2,066	2,305	2,729	2,953	3,113	3,163
OIL – STEAM	48,672	47,095	44,417	43,616	42,780	41,177	40,050	39,334	39,533	39,256	39,212
OIL – CT	26,667	25,916	25,995	25,435	25,420	25,419	25,457	25,777	26,077	26,448	26,456
OIL – CC	1,458	1,214	1,214	1,214	1,214	1,214	1,214	1,314	1,314	1,314	1,314
GAS – STEAM	39,768	39,226	39,215	39,433	39,433	39,085	38,981	38,836	38,681	38,016	36,336
GAS – CT	2,747	2,757	2,757	2,757	2,807	2,807	2,807	2,807	2,781	2,781	2,784
GAS – CC	781	785	785	785	785	785	785	785	730	730	730
DUAL FUEL – STEAM	62,153	62,792	62,149	60,780	58,684	58,427	58,033	57,224	56,695	56,084	55,411
DUAL FUEL – CT	10,842	11,469	11,708	11,718	11,767	11,781	11,775	11,771	11,821	11,821	11,753
DUAL FUEL – CC	2,994	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091
OTHER	787	1,462	1,896	2,393	2,809	3,454	3,754	4,110	4,517	6,339	9,743
TOTAL	586,142	597,692	620,015	641,706	657,042	675,628	685,271	698,500	705,792	716,675	723,732

NERC-Canada (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	14,814	15,471	15,929	16,501	17,060	17,639	17,909	18,269	18,723	19,363	19,453
NUCLEAR	5,658	6,394	7,812	9,625	10,922	11,703	12,584	13,465	13,465	13,465	14,346
HYDRO	37,537	39,139	42,561	44,297	44,508	44,664	44,880	44,914	45,193	46,298	46,193
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	633
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253
OIL – CT	833	866	891	927	927	927	927	927	927	927	1,327
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	1,644	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,477	1,477
GAS – CT	422	422	422	422	422	422	422	419	373	344	299
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	1,086	1,086	1,086	1,086	1,086	1,086	1,086	1,086	996	996	996
DUAL FUEL – CT	266	266	266	266	266	266	266	266	266	266	266
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	333	366	399	432	465	498	531	564
TOTAL	66,513	69,472	74,795	79,285	81,385	82,934	84,334	85,639	86,269	87,920	89,807

ECAR (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	74,470	76,141	76,554	79,176	80,690	82,552	82,552	82,552	83,038	83,418	84,048
NUCLEAR	4,576	4,528	7,586	8,106	8,926	10,056	11,730	11,730	12,367	12,367	12,367
HYDRO	561	609	609	609	609	609	609	609	609	609	609
PUMPED STORAGE	2,767	2,767	2,767	2,767	3,187	3,607	3,607	3,607	3,607	3,607	3,607
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	3,948	3,657	3,253	3,253	3,253	3,253	3,407	3,613	3,812	3,767	3,687
OIL – CT	2,104	2,088	2,088	2,088	2,088	2,088	2,088	2,088	2,088	2,163	2,163
OIL – CC	392	226	226	226	226	226	226	226	226	226	226
GAS – STEAM	143	29	29	317	317	29	29	29	29	29	29
GAS – CT	958	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	89,919	91,045	94,112	97,542	100,296	103,420	105,248	105,454	106,776	107,186	107,736

ERCOT (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	10,656	11,056	11,056	11,056	11,776	12,961	14,338	17,517	18,080	19,208	19,950
NUCLEAR	0	0	1,150	1,150	2,300	3,550	3,550	4,800	4,800	4,800	4,800
HYDRO	230	230	230	230	230	233	233	233	233	233	233
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	47	47	47	41	41	41	41	41	41	41	41
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	25,533	25,540	25,544	25,501	25,501	25,501	25,421	25,276	25,121	24,590	23,818
GAS – CT	324	439	439	439	439	439	439	439	439	439	439
GAS – CC	162	162	162	162	162	162	162	162	162	162	162
DUAL FUEL – STEAM	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492	5,492
DUAL FUEL – CT	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[a]	0	0	0	0	0	25	50	50	50	1,250	3,500
TOTAL	43,452	43,974	45,128	45,079	46,949	49,412	50,734	55,018	55,426	57,223	59,443

MAAC (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	15,911	16,448	17,248	17,248	17,248	17,423	18,043	18,043	17,869	18,146	18,146
NUCLEAR	8,198	9,248	9,248	11,353	11,353	12,420	12,420	13,475	13,475	13,475	13,475
HYDRO	956	956	956	1,031	1,144	1,144	1,146	1,146	1,146	1,146	1,146
PUMPED STORAGE	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	12,300	11,703	11,320	11,079	11,079	10,523	10,167	9,895	9,895	9,687	9,948
OIL – CT	6,902	6,902	6,901	6,425	6,425	6,423	6,420	6,420	6,445	6,445	6,442
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	474	474	474	474	474	474	474	474	448	448	448
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CT	108	108	108	108	108	108	108	108	108	108	108
DUAL FUEL – CC	332	332	332	332	332	332	332	332	332	332	332
OTHER[b]	0	0	0	47	147[c]	47	47	47	47	47	447[d]
TOTAL	46,461	47,451	47,867	49,377	49,590	50,174	50,437	51,220	51,045	51,114	51,772

MAIN (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	26,390	27,075	27,095	28,031	28,031	28,041	28,041	28,041	28,041	28,041	27,910
NUCLEAR[e]	6,283	7,331	9,499	11,569	13,779	14,869	14,869	14,869	14,899	14,899	14,899
HYDRO	573	572	574	574	575	575	575	576	576	577	577
PUMPED STORAGE	300	300	300	300	300	300	300	300	300	300	300
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	3,466	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396
OIL – CT[f]	1,406	1,236	1,236	1,236	1,236	1,236	1,236	1,236	1,260	1,296	1,296
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	67	67	67	67	67	67	67	67	67	67	67
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	744	675	483	483	483	483	483	483	452	452	452
DUAL FUEL – CT[f]	1,349	1,272	1,272	1,282	1,282	1,282	1,282	1,282	1,282	1,282	1,228
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[g]	0	0	0	12	25	35	45	56	61	72	77
TOTAL	40,578	41,924	43,922	46,950	49,174	50,284	50,294	50,306	50,334	50,382	50,202

MAIN — Cmnwlth Ed. (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911	6,911
NUCLEAR[*]	4,778	5,826	7,994	7,994	10,204	11,294	11,294	11,294	11,294	11,294	11,294
HYDRO	0	0	0	0	0	0	0	0	0	0	0
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698
OIL – CT[1]	600	438	438	438	438	438	438	438	438	438	438
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CT[1]	677	599	599	599	599	599	599	599	599	599	599
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	15,664	16,472	18,640	18,640	20,850	21,940	21,940	21,940	21,940	21,940	21,940

MAIN — E. Missouri (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	5,584	5,596	5,596	5,596	5,596	5,596	5,596	5,596	5,596	5,596	5,596
NUCLEAR	0	0	0	1,120	1,120	1,120	1,120	1,120	1,150	1,150	1,150
HYDRO	331	331	331	331	331	331	331	331	331	331	331
PUMPED STORAGE	300	300	300	300	300	300	300	300	300	300	300
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	265	264	264	264	264	264	264	264	264	264	264
OIL – CT	349	349	349	349	349	349	349	349	349	349	349
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	37	37	37	37	37	37	37	37	37	37	37
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	266	266	266	266	266	266	266	266	266	266	266
DUAL FUEL – CT	13	13	13	13	13	13	13	13	13	13	13
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7,145	7,156	7,156	8,276	8,276	8,276	8,276	8,276	8,306	8,306	8,306

MAIN — So. Cent. Ill. (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	7,630	8,202	8,222	8,222	8,222	8,222	8,222	8,222	8,222	8,222	8,222
NUCLEAR	0	0	0	950	950	950	950	950	950	950	950
HYDRO	2	2	2	2	2	2	2	2	2	2	2
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	503	434	434	434	434	434	434	434	434	434	434
OIL – CT	102	93	93	93	93	93	93	93	117	153	153
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	30	30	30	30	30	30	30	30	30	30	30
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	150	150	150	150	150	150	150	150	150	150	150
DUAL FUEL – CT	163	163	163	163	163	163	163	163	163	163	163
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8,580	9,074	9,094	10,044	10,044	10,044	10,044	10,044	10,068	10,104	10,104

MAIN — WUM (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	6,265	6,366	6,366	7,302	7,302	7,312	7,312	7,312	7,312	7,312	7,181
NUCLEAR	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505
HYDRO	240	239	241	241	242	242	242	243	243	244	244
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	355	356	356	356	356	356	356	356	356	356	356
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	328	259	67	67	67	67	67	67	36	36	36
DUAL FUEL – CT	496	497	497	507	507	507	507	507	507	507	453
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[9]	0	0	0	12	25	35	45	56	61	72	77
TOTAL	9,189	9,222	9,032	9,990	10,004	10,024	10,034	10,046	10,020	10,032	9,852

MAPP-U.S. (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	16,783	17,609	18,679	18,679	19,142	19,330	20,122	20,797	20,797	21,839	21,839
NUCLEAR	3,702	3,700	3,699	3,699	3,699	3,699	3,699	3,699	3,699	3,699	3,699
HYDRO	3,026	2,987	2,911	2,921	2,910	2,904	2,931	2,931	2,933	2,933	2,933
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	503	135	136	135	135	135	135	135	135	135	135
OIL – CT	2,723	2,450	2,530	2,575	2,576	2,581	2,631	2,621	2,642	2,659	2,701
OIL – CC	173	111	111	111	111	111	111	111	111	111	111
GAS – STEAM	209	0	0	0	0	0	0	0	0	0	0
GAS – CT	198	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	0	417	371	367	362	412	398	398	398	389	389
DUAL FUEL – CT	0	554	554	554	554	581	575	571	571	571	571
DUAL FUEL – CC	0	62	62	62	62	62	62	62	62	62	62
OTHER^h	14	14	14	14	14	14	14	14	14	14	14
TOTAL	27,331	28,039	29,067	29,117	29,565	29,829	30,678	31,339	31,362	32,412	32,454

MAPP-Canada (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	1,679	1,959	1,959	1,959	1,959	1,959	1,959	1,959	2,053	2,333	2,333
NUCLEAR	0	0	0	0	0	0	0	0	0	0	0
HYDRO	4,178	4,178	4,178	4,262	4,430	4,430	4,430	4,430	4,430	4,430	4,430
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	22	22	22	22	22	22	22	22	22	22	22
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	115	115	115	115	115	115	115	115	115	115	70
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	186	186	186	186	186	186	186	186	96	96	96
DUAL FUEL – CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6,180	6,460	6,460	6,544	6,712	6,712	6,712	6,712	6,716	6,996	6,951

continued

NPCC-U.S. (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	5,449	5,429	6,540	7,939	8,430	9,153	9,955	10,766	11,466	11,466	11,466
NUCLEAR	7,768	7,796	8,740	9,890	11,040	13,270	13,270	13,270	13,270	13,270	13,270
HYDRO	5,258	5,292	5,337	5,357	5,374	5,403	5,426	5,442	5,447	5,494	5,495
PUMPED STORAGE	2,613	2,613	2,613	2,613	2,613	2,613	2,613	2,613	3,613	3,613	3,613
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	17,551	17,414	16,368	15,979	15,488	14,441	13,516	12,866	12,866	12,866	12,682
OIL – CT	3,569	3,598	3,598	3,523	3,523	3,520	3,520	3,520	3,520	3,585	3,585
OIL – CC	380	364	364	364	364	364	364	364	364	364	364
GAS – STEAM	583	592	592	592	592	592	592	592	592	592	592
GAS – CT	182	233	233	233	233	233	233	233	233	233	233
GAS – CC	99	99	99	99	99	99	99	99	99	99	99
DUAL FUEL – STEAM	6,001	6,024	6,024	5,625	5,625	5,625	5,596	5,522	5,461	5,461	5,461
DUAL FUEL – CT	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	25	25	112	184	206	206	216	236	266	266	263
TOTAL	50,563	50,564	51,705	53,483	54,672	56,604	56,485	56,608	58,282	58,394	58,208

NPCC — New York (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	3,376	3,363	4,291	5,303	5,794	6,262	6,448	6,927	7,627	7,627	7,627
NUCLEAR	3,569	3,569	4,513	4,513	4,513	5,593	5,593	5,593	5,593	5,593	5,593
HYDRO	3,972	3,990	4,020	4,028	4,039	4,068	4,091	4,107	4,112	4,159	4,160
PUMPED STORAGE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	2,000	2,000	2,000
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	8,527	8,463	7,599	7,599	7,108	6,316	6,126	5,836	5,836	5,836	5,836
OIL – CT	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	45	45	45	45	45	45	45	45	45	45	45
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	6,001	6,024	6,024	5,625	5,625	5,625	5,596	5,522	5,461	5,461	5,461
DUAL FUEL – CT	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085	1,085
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	32	82	82	82	92	112	142	142	142
TOTAL	29,990	29,954	31,024	31,695	31,706	32,491	32,491	32,642	34,316	34,363	34,364

NPCC — New England (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	2,073	2,066	2,249	2,636	2,636	2,891	3,507	3,839	3,839	3,839	3,839
NUCLEAR	4,199	4,227	4,227	5,377	6,527	7,677	7,677	7,677	7,677	7,677	7,677
HYDRO	1,286	1,302	1,317	1,329	1,335	1,335	1,335	1,335	1,335	1,335	1,335
PUMPED STORAGE	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613	1,613
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	9,024	8,951	8,769	8,380	8,380	8,125	7,390	7,030	7,030	7,030	6,846
OIL – CT	1,154	1,183	1,183	1,108	1,108	1,105	1,105	1,105	1,105	1,170	1,170
OIL – CC	380	364	364	364	364	364	364	364	364	364	364
GAS – STEAM	583	592	592	592	592	592	592	592	592	592	592
GAS – CT	137	188	188	188	188	188	188	188	188	188	188
GAS – CC	99	99	99	99	99	99	99	99	99	99	99
DUAL FUEL – STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	25	25	80	102	124	124	124	124	124	124	121
TOTAL	20,573	20,610	20,681	21,788	22,966	24,113	23,994	23,966	23,966	24,031	23,844

NPCC-Canada (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	9,796	9,796	9,808	10,014	10,014	10,014	10,014	10,014	10,014	10,014	10,014
NUCLEAR	5,658	6,394	7,812	9,625	10,922	11,703	12,584	13,465	13,465	13,465	14,346
HYDRO	24,220	25,822	27,894	29,096	29,139	29,181	29,212	29,246	29,525	30,030	29,572
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	633
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253	4,253
OIL – CT	811	844	869	905	905	905	905	905	905	905	1,305
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	588	588	588	588	588	588	588	588	588	588	588
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[1]	0	0	0	33	66	99	132	165	198	231	264
TOTAL	45,326	47,697	51,224	54,514	55,887	56,743	57,688	58,636	58,948	59,486	60,975

continued

NPCC — New Brunswick (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	279	279	279	279	279	279	279	279	279	279	279
NUCLEAR	410	630	630	630	630	630	630	630	630	630	630
HYDRO	846	846	846	846	846	846	846	846	846	846	846
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391	1,391
OIL - CT	26	26	26	26	26	26	26	26	26	26	26
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,952	3,172	3,172	3,172	3,172	3,172	3,172	3,172	3,172	3,172	3,172

NPCC — Ontario (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	9,517	9,517	9,529	9,735	9,735	9,735	9,735	9,735	9,735	9,735	9,735
NUCLEAR	5,248	5,764	6,545	8,358	9,655	10,436	11,317	12,198	12,198	12,198	13,079
HYDRO	6,107	6,135	6,156	6,164	6,164	6,164	6,164	6,164	6,164	6,164	6,164
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232
OIL - CT	350	383	408	444	444	444	444	444	444	444	444
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	588	588	588	588	588	588	588	588	588	588	588
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[1]	0	0	0	33	66	99	132	165	198	231	264
TOTAL	24,042	24,619	25,458	27,554	28,884	29,698	30,612	31,526	31,559	31,592	32,506

NPCC — Quebec (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	0	0	0	0	0	0	0	0	0	0	0
NUCLEAR	0	0	637	637	637	637	637	637	637	637	637
HYDRO	17,267	18,841	20,892	22,086	22,129	22,171	22,202	22,236	22,515	23,020	22,562
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	633
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	630	630	630	630	630	630	630	630	630	630	630
OIL - CT	435	435	435	435	435	435	435	435	435	435	835
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	18,332	19,906	22,594	23,788	23,831	23,873	23,904	23,938	24,217	24,722	25,297

SERC (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	58,354	60,658	62,974	65,771	66,219	67,996	68,496	71,127	70,974	73,189	74,584
NUCLEAR	20,850	21,644	23,849	25,019	28,234	30,562	33,009	34,159	35,059	35,059	35,059
HYDRO	10,049	10,164	10,319	10,645	10,747	10,747	10,747	10,812	10,812	10,812	10,882
PUMPED STORAGE	2,909	2,909	2,909	2,909	3,434	4,806	5,031	5,106	5,106	5,106	5,106
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	10,448	10,334	9,488	9,318	8,973	8,973	8,973	8,973	8,973	8,949	8,908
OIL - CT	7,540	7,221	7,221	7,175	7,159	7,158	7,133	7,163	7,193	7,171	7,140
OIL - CC	0	0	0	0	0	0	0	100	100	100	100
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	30	30	30	30	30	30	30	30	30	30	30
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - STEAM	8,160	8,494	8,275	7,962	7,786	7,725	7,718	7,718	7,615	7,485	7,485
DUAL FUEL - CT	2,655	2,696	2,696	2,696	2,696	2,683	2,683	2,683	2,733	2,733	2,733
DUAL FUEL - CC	500	500	500	500	500	500	500	500	500	500	500
OTHER	38	453	453	460	465	470	485	485	585	590	590
TOTAL	121,533	125,103	128,714	132,485	136,243	141,650	144,805	148,856	149,680	151,724	153,117

SERC — Florida (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	2,729	3,979	4,198	6,160	6,263	7,232	7,282	8,436	8,436	9,036	9,461
NUCLEAR	2,920	3,722	3,722	3,722	3,722	3,722	3,722	3,722	3,722	3,722	3,722
HYDRO	36	36	36	47	47	47	47	47	47	47	47
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	7,981	7,867	7,867	7,867	7,867	7,867	7,867	7,867	7,867	7,867	7,867
OIL – CT	2,648	2,693	2,693	2,680	2,680	2,679	2,679	2,679	2,679	2,670	2,670
OIL – CC	0	0	0	0	0	0	0	100	100	100	100
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	6,177	6,511	6,292	5,979	5,858	5,858	5,851	5,851	5,829	5,829	5,829
DUAL FUEL – CT	1,722	1,763	1,763	1,763	1,763	1,750	1,750	1,750	1,750	1,750	1,750
DUAL FUEL – CC	472	472	472	472	472	472	472	472	472	472	472
OTHER	0	0	0	0	0	0	0	0	100	100	100
TOTAL	24,685	27,043	27,043	28,690	28,672	29,627	29,670	30,924	31,002	31,593	32,018

SERC — Southern (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	20,606	20,766	21,565	22,230	22,230	23,038	23,038	24,515	24,362	25,027	25,277
NUCLEAR	3,169	3,161	3,286	3,286	3,286	4,437	4,562	5,712	5,712	5,712	5,712
HYDRO	3,225	3,342	3,457	3,622	3,724	3,724	3,724	3,789	3,789	3,789	3,859
PUMPED STORAGE	487	487	487	487	487	1,334	1,484	1,484	1,484	1,484	1,484
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	228	228	228	228	228	228	228	228	228	204	163
OIL – CT	1,214	1,214	1,214	1,181	1,165	1,165	1,140	1,170	1,200	1,187	1,156
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	21	21	21	21	21	21	21	21	21	21	21
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	1,071	1,071	1,071	1,071	1,016	955	955	955	874	744	744
DUAL FUEL – CT	62	62	62	62	62	62	62	62	62	62	62
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	30,083	30,352	31,391	32,188	32,219	34,964	35,214	37,936	37,732	38,230	38,478

SERC — TVA (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	16,217	16,195	16,195	16,195	16,195	16,195	16,195	16,195	16,195	16,195	16,195
NUCLEAR	5,451	5,451	5,451	6,621	7,791	8,968	10,145	10,145	10,145	10,145	10,145
HYDRO	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306	4,306
PUMPED STORAGE	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066	2,066
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CT	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	29,340	29,318	29,318	30,488	31,658	32,835	34,012	34,012	34,012	34,012	34,012

SERC — VACAR (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	18,802	19,718	21,016	21,186	21,531	21,531	21,981	21,981	21,981	22,931	23,651
NUCLEAR	9,310	9,310	11,390	11,390	13,435	13,435	14,580	14,580	15,480	15,480	15,480
HYDRO	2,482	2,480	2,520	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670
PUMPED STORAGE	1,122	1,122	1,122	1,122	1,647	2,172	2,247	2,322	2,322	2,322	2,322
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	2,239	2,239	1,393	1,223	878	878	878	878	878	878	878
OIL – CT	1,612	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	9	9	9	9	9	9	9	9	9	9	9
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	912	912	912	912	912	912	912	912	912	912	912
DUAL FUEL – CT	871	871	871	871	871	871	871	871	921	921	921
DUAL FUEL – CC	28	26	28	28	28	28	28	28	28	28	28
OTHER[1]	38	453	453	460	465	470	485	485	485	490	490
TOTAL	37,425	38,390	40,962	41,119	43,694	44,224	45,909	45,984	46,934	47,889	48,609

SPP (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	20,664	22,657	22,937	25,222	26,684	26,590	27,666	27,622	29,082	29,762	32,062
NUCLEAR	1,694	1,694	3,923	5,004	5,662	5,756	5,850	7,069	7,069	7,069	7,069
HYDRO	2,346	2,367	2,467	2,547	2,547	2,547	2,547	2,547	2,547	2,547	2,547
PUMPED STORAGE	260	260	260	260	260	260	260	260	260	260	260
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	1,543	1,534	1,534	1,532	1,532	1,532	1,548	1,848	2,048	2,248	2,248
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	13,016	12,781	12,766	12,739	12,739	12,679	12,655	12,655	12,655	12,521	11,613
GAS – CT	248	248	248	248	248	248	248	248	248	248	189
GAS – CC	510	514	514	514	514	514	514	514	459	459	459
DUAL FUEL – STEAM	16,712	16,646	16,542	16,395	16,151	16,126	16,005	15,693	15,673	15,548	15,301
DUAL FUEL – CT	670	824	815	815	859	859	859	859	859	859	845
DUAL FUEL – CC	280	280	280	280	280	280	280	280	280	280	280
OTHER	293	293	293	293	293	468	468	644	644	846	1,094
TOTAL	58,236	60,098	62,579	65,849	67,769	67,859	68,900	70,239	71,824	72,647	73,967

SPP — W. Ark – La. – Miss. Area (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	3,603	4,934	4,934	5,681	6,283	6,189	6,635	6,541	7,341	7,341	8,141
NUCLEAR	1,694	1,694	3,923	3,923	4,581	4,675	4,769	5,988	5,988	5,988	5,988
HYDRO	69	69	69	69	69	69	69	69	69	69	69
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	281	281	281	281	281	281	281	281	281	281	281
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	4,978	4,989	4,929	4,902	4,902	4,878	4,854	4,854	4,854	4,720	4,435
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	12,896	12,896	12,674	12,545	12,321	12,321	12,185	11,891	11,891	11,766	11,686
DUAL FUEL – CT	34	124	124	124	124	124	124	124	124	124	124
DUAL FUEL – CC	203	203	203	203	203	203	203	203	203	203	203
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	23,758	25,190	27,137	27,728	28,764	28,740	29,120	29,951	30,751	30,492	30,927

SPP — Okla. Area (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	7,250	7,250	7,250	8,838	9,678	9,678	9,678	9,728	10,328	10,378	11,528
NUCLEAR	0	0	0	0	0	0	0	0	0	0	0
HYDRO	2,261	2,282	2,382	2,462	2,462	2,462	2,462	2,462	2,462	2,462	2,462
PUMPED STORAGE	260	260	260	260	260	260	260	260	260	260	260
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	67	67	67	65	65	65	61	361	561	761	761
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	7,838	7,732	7,777	7,777	7,777	7,741	7,741	7,741	7,741	7,741	7,118
GAS – CT	234	234	234	234	234	234	234	234	234	234	175
GAS – CC	510	514	514	514	514	514	514	514	459	459	459
DUAL FUEL – STEAM	1,781	1,781	1,899	1,899	1,899	1,892	1,892	1,892	1,872	1,872	1,734
DUAL FUEL – CT	18	18	18	18	18	18	18	18	18	18	4
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	290	290	290	290	290	465	465	641	641	843	1,091
TOTAL	20,509	20,428	20,691	22,357	23,197	23,329	23,325	23,851	24,576	25,028	25,592

SPP — W. Mo. – Kan. Area (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	9,811	10,473	10,753	10,703	10,723	10,723	11,353	11,353	11,413	12,043	12,393
NUCLEAR	0	0	0	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081
HYDRO	16	16	16	16	16	16	16	16	16	16	16
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	1,195	1,186	1,186	1,186	1,186	1,186	1,206	1,206	1,206	1,206	1,206
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	200	60	60	60	60	60	60	60	60	60	60
GAS – CT	14	14	14	14	14	14	14	14	14	14	14
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	2,035	1,969	1,969	1,951	1,931	1,913	1,928	1,910	1,910	1,910	1,881
DUAL FUEL – CT	618	682	673	673	717	717	717	717	717	717	717
DUAL FUEL – CC	77	77	77	77	77	77	77	77	77	77	77
OTHER	3	3	3	3	3	3	3	3	3	3	3
TOTAL	13,969	14,480	14,751	15,764	15,808	15,790	16,455	16,437	16,497	17,127	17,448

WSCC-U.S.[k] (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	23,550	24,293	26,086	27,910	28,576	29,757	30,372	32,013	33,328	35,059	35,904
NUCLEAR	2,591	4,775	9,212	10,471	11,465	13,180	13,180	13,180	13,180	15,705	15,705
HYDRO[1]	45,317	42,423	42,760	44,512	44,875	45,197	45,602	45,660	45,766	45,823	45,878
PUMPED STORAGE	2,030	2,834	2,935	2,934	2,934	2,932	2,950	2,871	2,871	2,871	3,021
GEOTHERMAL	909	1,240	1,486	1,702	1,979	2,066	2,305	2,729	2,953	3,113	3,163
OIL – STEAM	456	456	456	456	456	456	456	456	456	456	456
OIL – CT	833	840	840	840	840	840	840	840	840	840	840
OIL – CC	513	513	513	513	513	513	513	513	513	513	513
GAS – STEAM	284	284	284	284	284	284	284	284	284	284	284
GAS – CT	266	266	266	266	316	316	316	316	316	316	378
GAS – CC	10	10	10	10	10	10	10	10	10	10	10
DUAL FUEL – STEAM	25,044	25,044	24,962	24,456	22,785	22,564	22,341	21,918	21,604	21,257	20,831
DUAL FUEL – CT	3,967	3,922	4,170	4,170	4,175	4,175	4,175	4,175	4,175	4,175	4,175
DUAL FUEL – CC	1,882	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917	1,917
OTHER	417	677	1,024	1,383	1,659	2,189	2,429	2,578	2,850	3,254	3,758
TOTAL	108,069	109,494	116,921	121,824	122,784	126,396	127,690	129,460	131,063	135,593	136,833

WSCC — NWPP (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	8,776	9,025	9,725	10,375	11,275	11,275	11,474	11,694	12,164	12,184	12,704
NUCLEAR	1,080	1,080	2,180	2,180	2,180	3,420	3,420	3,420	3,420	5,945	5,945
HYDRO[1]	31,232	30,446	30,930	31,091	32,322	32,789	32,825	32,824	32,824	32,822	32,823
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	20	20	20	20	20	20	20	20	20
OIL – STEAM	136	136	136	136	136	136	136	136	136	136	136
OIL – CT	15	15	15	15	15	15	15	15	15	15	15
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	168	168	168	168	168	168	168	168	168	168	168
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	617	617	617	617	617	617	617	617	617	617	617
DUAL FUEL – CT	684	682	932	932	930	932	932	932	932	932	932
DUAL FUEL – CC	500	493	500	500	493	500	500	500	500	500	500
OTHER	80	85	148	168	178	208	223	238	253	268	333
TOTAL	43,288	42,747	45,371	46,202	48,334	50,080	50,330	50,564	51,049	53,607	54,193

WSCC — RMPA (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	4,656	5,043	5,700	5,716	5,721	5,728	5,728	6,223	6,286	6,286	6,636
NUCLEAR	200	200	200	200	275	275	275	275	275	275	275
HYDRO	2,189	2,189	2,211	2,286	2,341	2,428	2,472	2,472	2,474	2,474	2,474
PUMPED STORAGE	190	262	362	362	362	362	362	362	362	362	362
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL - CT	0	0	0	0	0	0	0	0	0	0	0
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL - STEAM	354	354	337	337	337	337	337	337	329	312	312
DUAL FUEL - CT	587	587	587	587	587	587	587	587	587	587	587
DUAL FUEL - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	7	7	7	7	7	7	7	7	32	32
TOTAL	8,176	8,642	9,404	9,495	9,630	9,724	9,768	10,263	10,320	10,328	10,678

WSCC — AZ-NM (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	6,238	6,361	6,521	7,190	7,299	7,801	8,008	8,151	8,426	9,616	10,111
NUCLEAR	0	0	920	1,837	2,413	2,756	2,756	2,756	2,756	2,756	2,756
HYDRO	662	676	676	676	676	676	676	676	676	676	676
PUMPED STORAGE	137	137	137	137	137	137	137	137	137	137	287
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL - CT	357	357	357	357	357	357	357	357	357	357	357
OIL - CC	513	513	513	513	513	513	513	513	513	513	513
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	10	10	10	10	10	10	10	10	10	10	10
DUAL FUEL - STEAM	2,866	2,866	2,866	2,758	2,681	2,599	2,599	2,536	2,536	2,536	2,503
DUAL FUEL - CT	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137
DUAL FUEL - CC	272	272	272	272	272	272	272	272	272	272	272
OTHER	0	0	0	0	0	0	0	0	0	173	173
TOTAL	12,192	12,329	13,409	14,887	15,495	16,258	16,465	16,545	16,820	18,183	18,795

WSCC — CA-SNV (MW)

Subregional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	3,876	4,114	4,140	3,929	4,281	4,754	4,962	5,746	6,452	6,473	6,453
NUCLEAR	1,311	3,495	5,912	6,254	6,597	6,729	6,729	6,729	6,729	6,729	6,729
HYDRO[1]	9,316	8,965	9,285	9,356	9,536	9,763	10,127	10,187	10,294	10,354	10,412
PUMPED STORAGE	1,703	2,399	2,436	2,435	2,435	2,433	2,451	2,372	2,372	2,372	2,372
GEOTHERMAL	909	1,240	1,466	1,682	1,959	2,046	2,285	2,709	2,933	3,093	3,143
OIL – STEAM	320	320	320	320	320	320	320	320	320	320	320
OIL – CT	461	468	468	468	468	468	468	468	468	468	468
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	284	284	284	284	284	284	284	284	284	284	284
GAS – CT	98	96	98	98	148	148	148	148	148	148	210
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	21,207	21,207	21,142	20,744	19,150	19,011	18,788	18,428	18,122	17,792	17,399
DUAL FUEL – CT	1,550	1,525	1,516	1,516	1,521	1,521	1,521	1,521	1,521	1,521	1,521
DUAL FUEL – CC	1,110	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152
OTHER	337	585	869	1,208	1,474	1,974	2,199	2,333	2,590	2,781	3,220
TOTAL	42,482	45,852	49,088	49,446	49,325	50,603	51,434	52,397	53,385	53,487	53,683

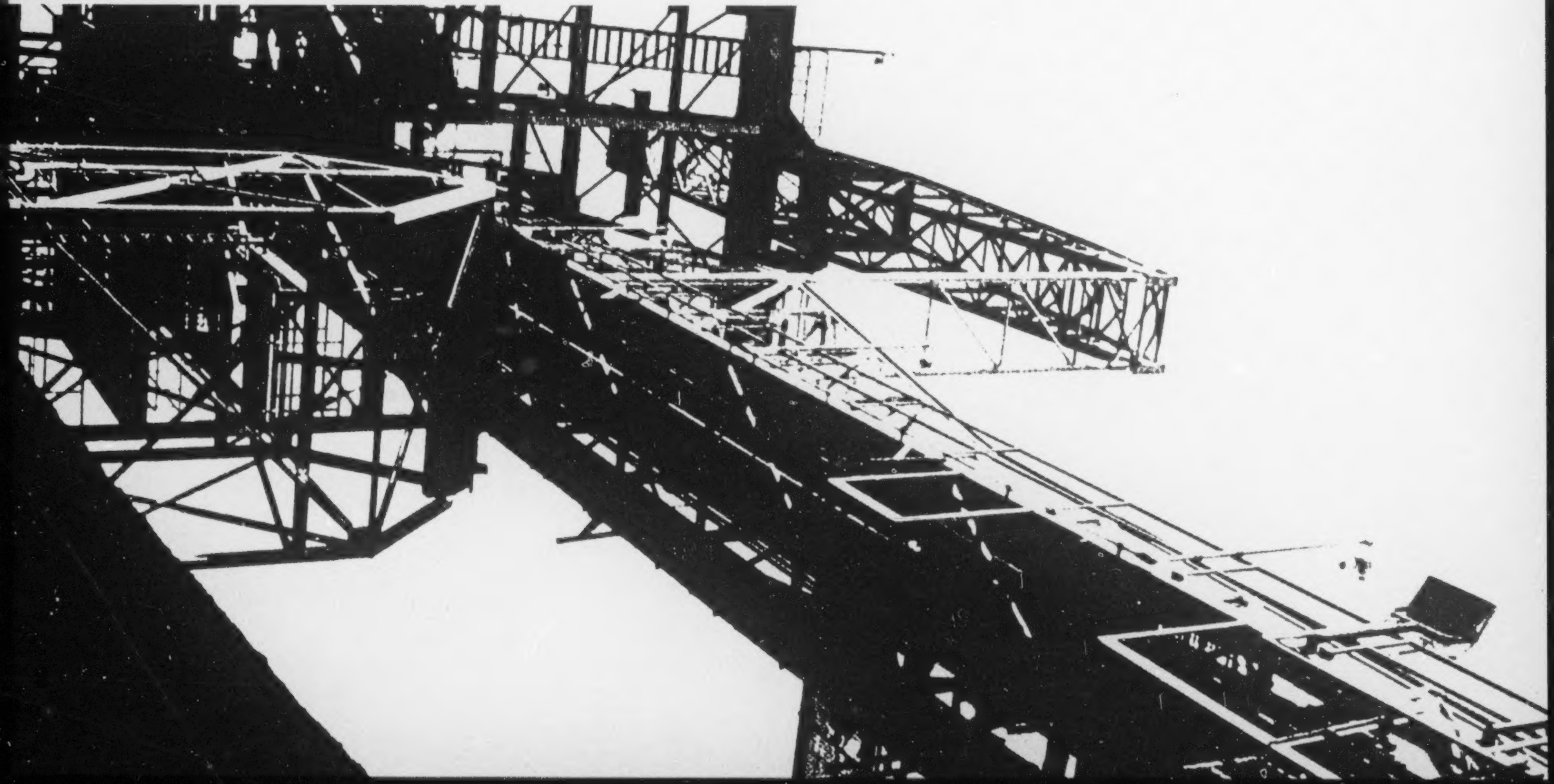
WSCC-Canada (MW)

Regional Table 14

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	3,339	3,716	4,162	4,528	5,087	5,666	5,936	6,296	6,656	7,016	7,106
NUCLEAR	0	0	0	0	0	0	0	0	0	0	0
HYDRO	9,139	9,139	10,489	10,939	10,939	11,053	11,238	11,238	11,238	11,838	12,191
PUMPED STORAGE	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	0	0	0	0	0	0	0	0	0	0	0
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	1,056	987	987	987	987	987	987	987	987	889	889
GAS – CT	307	307	307	307	307	307	307	304	258	229	229
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
DUAL FUEL – STEAM	900	900	900	900	900	900	900	900	900	900	900
DUAL FUEL – CT	266	266	266	266	266	266	266	266	266	266	266
DUAL FUEL – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	300	300	300	300	300	300	300	300
TOTAL	15,007	15,315	17,111	18,227	18,786	19,479	19,934	20,291	20,605	21,438	21,881

FOOTNOTES TO TABLE 14

a/ Refuse capability.
b/ 47 MW waste facility scheduled for 2/1/85.
c/ Includes 100 MW non-utility generation for summer 1986 only.
d/ Includes 400 MW undesignated base load unit scheduled for 1/1/92.
e/ 147 MW of inoperable nuclear capability is not included.
f/ 240 MW of inoperable combustion turbine capability is not included in the years 1983 through 1992.
g/ Small, cogeneration, and wood-fired steam units.
h/ 14 MW in each year is a steam unit using wood fuel.
i/ Cogeneration.
j/ Cogeneration and combustion turbines having dual fuel capability of oil and propane.
k/ Since the subregional peak demands may occur in different months than the coincident total WSCC (U.S.) peak demand, the sum of the individual subregional installed capabilities based on those peak demands may not equal the WSCC (U.S.) total.
l/ Adverse hydro is assumed for forecast years. Data for actual year can be greater than for forecast years if median hydro occurred.



Net Electrical Energy Generation
by Principal Energy Source

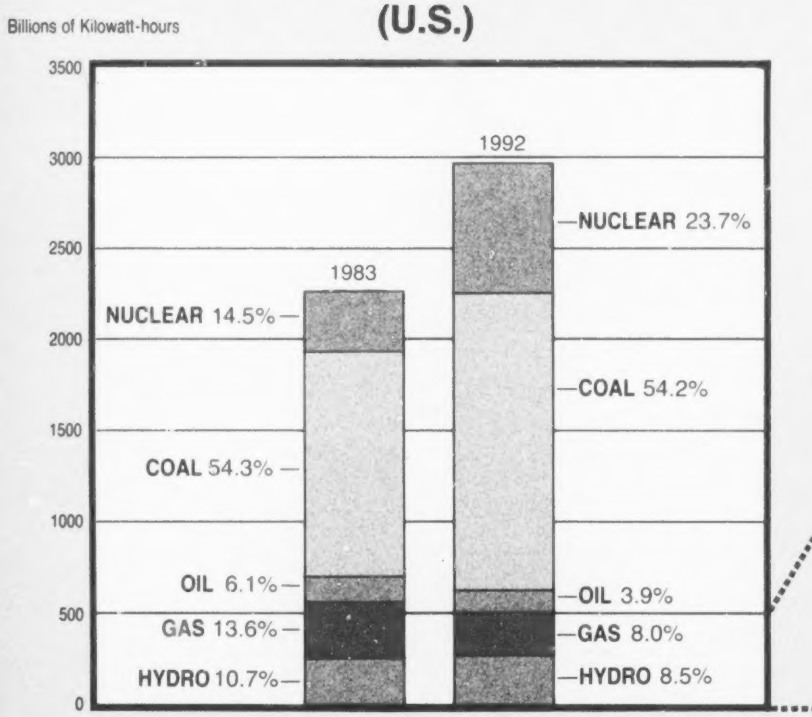
The *Net Electrical Energy Generation* data include the total annual energy projected to be generated, categorized by principal fuel sources. Also included is a tabulation of scheduled energy imports and exports to provide a tabulated total net energy available for load.

The Electric Generation data presented in Table 15 assume that the plans for the Installed Generating Capability, as tabulated for the various fuel types in Table 13 will be realized on schedule.

U.S. utilities are forecasting net electrical energy requirements for 1983-1992 which, in the aggregate, result in an average annual growth rate of 3.2%. Last year's ten-year forecast rate in the U.S. was 3.3%. Canadian utilities are forecasting a growth rate for 1983-1992 of 3.7%, down from the 5.1% ten-year rate forecast last year in Canada.

Even though the NERC regions are projecting a lower growth rate than in past years, based on this year's projections the industry will require 39% more electric energy ten years from now. The figures below show, by principal energy sources, the growth of net generation expected to provide this energy in the U.S. and Canada in 1992.

NERC Electric Generation by Principal Energy Source*

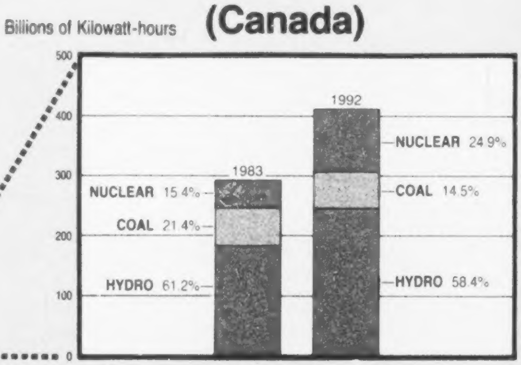


Share of Actual Net Generation, 1982

	U.S.	Canada
Coal	53.4%	21.7%
Nuclear	12.8%	12.6%
Hydro	14.0%	62.5%
Oil	6.1%	1.4%
Gas	13.3%	1.4%
Other	0.4%*	0.4%**

*Includes pumped storage. The net negative generation from pumped storage reduces generation from OTHER to 0.4%.

**Includes surplus energy purchased from non-utilities.



*The difference between the sum of the parts and 100% represents the share by sources not shown, including net pumped storage requirements.

Net Energy For Load (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	347,891	361,100	378,800	404,100	415,000	426,300	440,200	452,600	462,700	473,400	486,300
ERCOT	169,769	178,023	187,354	193,766	201,032	209,665	220,707	231,505	242,563	252,606	262,929
MAAC	171,662	175,464	180,646	185,173	189,214	192,944	197,174	201,370	205,435	209,159	212,779
MAIN	158,116	164,645	170,171	175,674	179,758	184,807	188,831	193,220	197,417	201,616	205,901
MAPP – U.S.	96,992	102,656	108,120	113,749	117,911	121,900	125,774	129,659	133,473	137,166	140,979
NPCC – U.S.	201,377	204,159	208,245	212,270	214,870	218,358	223,151	228,371	233,034	238,006	243,057
SERC	466,832	492,507	509,047	530,495	547,381	568,395	587,755	606,650	625,313	643,970	662,537
SPP	211,595	218,738	230,490	238,369	246,929	254,882	262,700	270,779	278,751	286,646	295,118
WSCC – U.S.	435,310	454,125	477,529	497,110	515,005	536,165	554,261	568,617	579,699	596,653	613,864
NERC – U.S.	2,258,744	2,351,417	2,450,402	2,550,706	2,627,100	2,713,416	2,800,553	2,882,771	2,958,385	3,039,222	3,123,464
MAPP – CANADA	23,358	23,932	26,042	27,625	29,290	30,290	31,542	32,579	33,749	34,729	35,659
NPCC – CANADA	206,330	213,060	223,251	232,705	241,593	248,611	255,757	262,170	268,797	275,632	283,062
WSCC – CANADA	61,491	66,390	71,500	75,662	80,728	84,941	88,414	91,776	95,180	99,412	103,254
NERC – CANADA	291,179	303,382	320,793	335,992	351,611	363,842	375,713	386,525	397,726	409,773	421,975

Net Energy For Load (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	64,378	65,500	68,100	70,800	72,200	73,650	75,100	76,600	78,150	79,700	81,300
EAST MISSOURI	26,302	27,416	28,012	28,603	29,297	29,983	30,680	31,364	32,048	32,762	33,492
SO. CENT. ILL.	30,622	32,298	32,870	34,052	35,068	36,812	37,532	38,554	39,545	40,550	41,564
WUM	36,814	39,431	41,189	42,219	43,193	44,362	45,519	46,702	47,674	48,604	49,545
MAIN	158,116	164,645	170,171	175,674	179,758	184,807	188,831	193,220	197,417	201,616	205,901
NEW YORK	117,147	116,434	117,753	120,397	122,511	124,493	126,909	129,311	131,356	133,430	135,596
NEW ENGLAND	84,230	87,725	90,492	91,873	92,359	93,865	96,242	99,060	101,678	104,576	107,461
NPCC – U.S.	201,377	204,159	208,245	212,270	214,870	218,358	223,151	228,371	233,034	238,006	243,057
NEW BRUNSWICK	8,015	8,562	9,501	9,959	10,375	10,675	10,939	11,200	11,461	11,724	11,985
ONTARIO	100,836	104,560	108,728	112,640	115,230	117,765	120,567	122,643	124,830	127,327	130,229
QUÉBEC	97,479	99,938	105,022	110,106	115,988	120,171	124,251	128,327	132,506	136,581	140,848
NPCC – CANADA	206,330	213,060	223,251	232,705	241,593	248,611	255,757	262,170	268,797	275,632	283,062
FLORIDA	94,994	100,637	102,923	107,076	110,791	114,498	118,376	122,182	126,154	130,378	134,717
SOUTHERN	108,547	113,324	117,878	121,631	125,199	128,861	132,951	137,782	141,793	145,916	149,956
TVA	110,036	116,973	119,603	124,608	129,204	136,827	142,032	145,971	150,423	154,223	158,027
VACAR	153,255	161,573	168,643	177,180	182,187	188,209	194,396	200,715	206,943	213,453	219,837
SERC	466,832	492,507	509,047	530,495	547,381	568,395	587,755	606,650	625,313	643,970	662,537
GROUP A	101,986	102,974	108,821	112,627	116,484	119,415	122,597	125,999	128,877	131,983	135,461
GROUP B	65,540	70,006	74,482	76,828	79,727	82,493	85,501	88,502	91,873	95,083	98,702
GROUP C	44,069	45,858	47,187	48,914	50,718	52,974	54,602	56,278	58,001	59,580	60,955
SPP	211,595	218,738	230,490	238,369	246,929	254,882	262,700	270,779	278,751	286,646	295,118
NWPP – U.S.	173,321	178,947	193,809	201,121	208,012	216,507	223,410	225,457	228,272	236,213	244,718
RMPA	31,280	33,383	35,083	36,820	38,819	40,703	42,425	44,209	45,969	47,704	49,514
AZ-NM	42,717	48,625	52,090	57,578	61,380	65,970	69,566	74,921	76,937	79,244	81,654
CA-SNV	187,992	193,170	196,547	201,591	206,794	212,985	218,860	224,030	228,521	233,492	237,978
WSCC – U.S.	435,310	454,125	477,529	497,110	515,005	536,165	554,261	568,617	579,699	596,653	613,864

Energy Imports Minus Exports (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	-25,929	-10,347	-6,597	-5,065	-4,764	-5,067	-4,381	-3,699	-2,473	-370	509
ERCOT	9,522	9,480	10,113	11,809	13,307	11,823	10,890	7,913	8,680	7,759	7,968
MAAC	22,298	17,498	18,464	19,375	18,459	19,114	18,865	18,908	18,086	18,518	18,796
MAIN	8,731	4,474	2,041	-1,317	-3,007	-1,841	-550	232	455	601	1,272
MAPP – U.S.	-610	-5,140	-4,052	-5,574	-5,591	-5,270	-4,972	-3,899	-2,659	-4,793	-3,527
NPCC – U.S.	17,137	16,667	18,767	21,732	20,232	22,932	22,632	22,532	22,432	22,232	21,432
SERC	1,421	2,633	-3,360	-8,812	-12,504	-11,458	-10,219	-8,899	-7,887	-8,529	-1,677
SPP	6,534	-2,429	-2,247	6,988	3,533	3,178	2,329	3,350	3,317	3,917	1,956
WSCC – U.S.	2,819	7,615	6,138	11,748	13,541	12,923	15,148	17,731	17,057	18,166	21,750
NERC – U.S.	41,923	40,451	39,267	50,884	43,206	46,334	49,742	54,169	57,008	57,501	68,479
MAPP – CANADA	-6,156	-7,804	-5,704	-4,939	-4,047	-3,497	-2,804	-1,995	-1,233	-1,055	-1,885
NPCC – CANADA[a]	14,896	9,902	2,144	-2,142	-5,139	-11,282	-13,688	-12,947	-8,280	-4,993	-1,507
WSCC – CANADA	-4,052	-351	0	0	0	0	0	0	0	0	0
NERC – CANADA	4,668	1,747	-3,560	-7,081	-9,186	-14,779	-16,492	-14,942	-9,513	-6,048	-3,392

Energy Imports Minus Exports (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	6,478	3,700	2,060	1,690	570	510	770	1,170	1,250	1,150	1,140
EAST MISSOURI	762	71	-49	-1,578	-2,089	-1,995	-1,035	-1,003	-876	-639	-281
SO. CENT. ILL.	-434	-1,644	-1,871	-2,196	-2,360	-1,370	-1,297	-999	-990	-937	-837
WUM	1,925	2,347	1,901	767	872	1,014	1,012	1,064	1,071	1,027	1,250
MAIN	8,731	4,474	2,041	-1,317	-3,007	-1,841	-550	232	455	601	1,272
NEW YORK	10,112	10,467	11,767	14,632	14,932	15,232	15,532	15,532	15,532	15,532	15,532
NEW ENGLAND	7,025	6,200	7,000	7,100	5,300	7,700	7,100	7,000	6,900	6,700	5,900
NPCC – U.S.	17,137	16,667	18,767	21,732	20,232	22,932	22,632	22,532	22,432	22,232	21,432
NEW BRUNSWICK	410	-810	-249	361	961	994	1,186	1,382	1,767	1,817	1,979
ONTARIO	-4,354	-3,345	-3,174	-3,103	-3,089	-3,638	-5,939	-8,994	-8,999	-9,005	-8,847
QUÉBEC[a]	18,840	14,057	5,567	600	-3,011	-8,638	-8,935	-5,335	-1,048	2,195	5,361
NPCC – CANADA	14,896	9,902	2,144	-2,142	-5,139	-11,282	-13,688	-12,947	-8,280	-4,993	-1,507
FLORIDA	5,839	12,079	13,456	19,349	20,244	16,913	16,966	16,763	16,944	17,268	17,589
SOUTHERN	-10,568	-11,470	-16,646	-26,015	-30,025	-26,604	-26,748	-25,729	-26,020	-25,992	-21,525
TVA	-2,268	-143	359	267	280	334	691	343	384	418	830
VACAR	8,418	2,167	-529	-2,413	-3,003	-2,101	-1,128	-276	805	-223	1,429
SERC	1,421	2,633	-3,360	-8,812	-12,504	-11,458	-10,219	-8,899	-7,887	-8,529	-1,677
GROUP A	18,588	10,724	9,918	19,273	17,152	15,218	14,925	14,045	13,604	13,502	12,268
GROUP B	-10,946	-9,168	-9,127	-8,898	-10,268	-8,569	-8,772	-6,937	-6,880	-6,164	-6,302
GROUP C	-1,108	-3,985	-3,038	-3,387	-3,351	-3,471	-3,824	-3,758	-3,407	-3,421	-4,010
SPP	6,534	-2,429	-2,247	6,988	3,533	3,178	2,329	3,350	3,317	3,917	1,956
NWPP – U.S.	-31,017	-310	-1,215	-191	921	680	-9	236	668	879	869
RMPA	-3,013	-2,728	-2,712	-2,599	-2,528	-2,448	-2,375	-2,299	-2,642	-2,614	-2,543
AZ-NM	-5,024	-4,426	-4,011	-4,409	-4,416	-4,511	-3,974	-1,482	-1,698	-1,466	-1,872
CA-SNV	41,873	15,079	14,076	18,947	19,564	19,202	21,506	21,276	20,729	21,367	25,296
WSCC – U.S.	2,819	7,615	6,138	11,748	13,541	12,923	15,148	17,731	17,057	18,166	21,750

Total Net[b] Generation (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	373,020	371,447	385,397	409,165	419,764	431,367	444,[illegible]	456,299	465,173	473,770	485,791
ERCOT	160,247	168,543	177,241	181,957	187,725	197,842	209,817	223,592	233,883	244,847	254,961
MAAC	149,364	157,966	162,182	165,798	170,755	173,830	178,309	182,462	187,349	190,641	193,983
MAIN	149,385	160,171	168,130	176,991	182,765	186,648	189,381	192,988	196,962	201,015	204,629
MAPP – U.S.	97,602	107,796	112,172	119,323	123,502	127,170	130,746	133,558	136,132	141,959	144,506
NPCC – U.S.	184,240	187,492	189,478	190,538	194,638	195,426	200,519	205,839	210,602	215,774	221,625
SERC	465,411	489,874	512,407	539,307	559,885	579,853	597,974	615,549	633,200	652,499	664,214
SPP	205,061	221,167	232,737	231,381	243,396	251,704	260,371	267,429	275,434	282,729	293,162
WSCC – U.S.	432,491	446,510	471,391	485,362	501,464	523,242	539,113	550,886	562,642	578,487	592,114
NERC – U.S.	2,216,821	2,310,966	2,411,135	2,499,822	2,583,894	2,667,082	2,750,811	2,828,602	2,901,377	2,981,721	3,054,985
MAPP – CANADA	29,514	31,736	31,746	32,564	33,337	33,787	34,346	34,574	34,982	35,784	37,544
NPCC – CANADA	191,434	203,158	221,107	234,847	246,732	259,893	269,445	275,117	277,077	280,625	284,569
WSCC – CANADA	65,543	66,741	71,500	75,662	80,728	84,941	88,414	91,776	95,180	99,412	103,254
NERC – CANADA	286,491	301,635	324,353	343,073	360,797	378,621	392,205	401,467	407,239	415,821	425,367

Total Net[b] Generation (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	57,900	61,800	66,040	69,110	71,630	73,140	74,330	75,430	76,900	78,550	80.160
EAST MISSOURI	25,540	27,345	28,061	30,181	31,386	31,978	31,715	32,367	32,924	33,401	33,773
SO. CENT. ILL.	31,056	33,942	34,741	36,248	37,428	38,182	38,829	39,553	40,535	41,487	42,401
WUM	34,889	37,084	39,288	41,452	42,321	43,348	44,507	45,638	46,603	47,577	48,295
MAIN	149,385	160,171	168,130	176,991	182,765	186,648	189,381	192,988	196,962	201,015	204.629
NEW YORK	107,035	105,967	105,986	105,765	107,579	109,261	111,377	113,779	115,824	117,898	120,064
NEW ENGLAND	77,205	81,525	83,492	84,773	87,059	86,165	89,142	92,060	94,778	97,876	101,561
NPCC – U.S.	184,240	187,492	189,478	190,538	194,638	195,426	200,519	205,839	210,602	215,774	221,625
NEW BRUNSWICK	7,605	9,372	9,750	9,598	9,414	9,681	9,753	9,818	9,694	9,907	10,006
ONTARIO	105,190	107,905	111,902	115,743	118,319	121,403	126,506	131,637	133,829	136,332	139,076
QUÉBEC	78,639	85,881	99,455	109,506	118,999	128,809	133,186	133,662	133,554	134,386	135,487
NPCC – CANADA	191,434	203,158	221,107	234,847	246,732	259,893	269,445	275,117	277,077	280,625	284,569
FLORIDA	89,155	88,558	89,467	87,727	90,547	97,585	101,410	105,419	109,210	113,110	117,128
SOUTHERN	119,115	124,794	134,524	147,646	155,224	155,465	159,699	163,511	167,813	171,908	171,481
TVA	112,304	117,116	119,244	124,341	128,924	136,493	141,341	145,628	150,039	153,805	157,197
VACAR	144,837	159,406	169,172	179,593	185,190	190,310	195,524	200,991	206,138	213,676	218,408
SERC	465,411	489,874	512,407	539,307	559,885	579,853	597,974	615,549	633,200	652,499	664,214
GROUP A	83,398	92,150	98,903	93,354	99,332	104,197	107,672	111,954	115,273	118,481	123,193
GROUP B	76,486	79,174	83,609	85,726	89,995	91,062	94,273	95,439	98,753	101,247	105,004
GROUP C	45,177	49,843	50,225	52,301	54,069	56,445	58,426	60,036	61,408	63,001	64,965
SPP	205,061	221,167	232,737	231,381	243,396	251,704	260,371	267,429	275,434	282,729	293,162
NWPP – U.S.	204,338	179,257	195,024	201,312	207,091	215,827	223,419	225,221	227,604	235,334	243,849
RMPA	34,293	36,111	37,795	39,419	41,347	43,151	44,800	46,508	48,611	50,318	52,057
AZ-NM	47,741	53,051	56,101	61,987	65,796	70,481	73,540	76,403	78,635	80,710	83,526
CA-SNV	146,119	178,091	182,471	182,644	187,230	193,783	197,354	202,754	207,792	212,125	212,682
WSCC – U.S.	432,491	446,510	471,391	485,362	501,464	523,242	539,113	550,886	562,642	578,487	592,114

continued

Coal (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	347,164	345,831	339,534	353,317	360,164	360,329	369,152	371,539	374,091	381,088	391,620
ERCOT	62,146	66,465	65,768	66,306	69,674	75,982	84,534	97,332	104,538	114,496	124,760
MAAC	85,799	87,819	89,091	89,813	88,078	89,163	89,129	91,579	87,589	91,197	94,048
MAIN	105,766	113,007	107,976	105,045	102,218	103,536	105,150	107,305	110,832	113,325	114,860
MAPP – U.S.	60,897	70,373	74,945	80,088	84,699	88,972	91,704	94,340	97,179	103,049	105,479
NPCC – U.S.	32,055	34,763	41,587	44,282	49,380	50,168	58,528	65,975	67,368	69,192	69,600
SERC	270,584	294,761	301,659	322,313	331,300	331,486	340,049	354,950	364,363	378,406	389,455
SPP	90,508	103,473	108,653	115,437	120,860	124,685	129,405	133,042	141,318	143,736	151,125
WSCC – U.S.	129,949	138,418	149,981	154,393	161,333	173,700	183,083	190,201	199,571	206,996	215,005
NERC – U.S.	1,184,868	1,254,910	1,279,194	1,330,994	1,367,706	1,398,021	1,450,734	1,506,263	1,546,849	1,601,485	1,655,952
MAPP – CANADA	6,826	7,330	8,570	9,220	9,385	9,805	10,335	10,835	11,405	11,830	12,085
NPCC – CANADA	35,889	33,930	29,108	22,208	18,482	16,887	10,470	10,907	11,535	13,968	7,415
WSCC – CANADA	19,441	23,279	25,952	27,968	30,781	33,618	35,365	37,302	39,130	41,042	42,140
NERC – CANADA	62,156	64,539	63,630	59,396	58,648	60,310	56,170	59,044	62,070	66,840	61,640

Coal (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	28,008	26,960	21,650	21,780	16,850	15,880	16,110	16,920	17,700	18,060	18,880
EAST MISSOURI	23,812	25,890	26,395	23,732	24,166	24,564	24,066	24,641	24,753	25,262	25,669
SO. CENT. ILL.	31,034	33,598	31,528	30,965	31,808	32,503	33,168	32,982	34,792	35,713	35,599
WUM	22,912	26,559	28,403	26,568	29,394	30,589	31,806	32,762	33,587	34,290	34,712
MAIN	105,766	113,007	107,976	105,045	102,218	103,536	105,150	107,305	110,832	113,325	114,860
NEW YORK	20,625	21,643	26,217	27,542	31,180	31,268	36,578	43,105	44,498	46,362	47,000
NEW ENGLAND	11,430	13,120	15,370	16,740	18,200	18,900	21,950	22,870	22,870	22,830	22,600
NPCC – U.S.	32,055	34,763	41,587	44,282	49,380	50,168	58,528	65,975	67,368	69,192	69,600
NEW BRUNSWICK	1,321	1,204	1,220	1,216	1,209	1,234	1,246	1,246	1,246	1,246	1,246
ONTARIO	34,568	32,726	27,888	20,992	17,273	15,653	9,224	9,661	10,289	12,722	6,169
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	35,889	33,930	29,108	22,208	18,482	16,887	10,470	10,907	11,535	13,968	7,415
FLORIDA	16,733	24,283	25,783	33,151	36,525	40,844	44,814	48,844	50,737	53,223	56,404
SOUTHERN	91,528	98,553	105,750	117,662	123,710	119,028	120,708	121,683	125,234	130,278	128,977
TVA	65,410	74,764	70,200	70,230	68,797	70,445	71,695	75,054	78,473	81,737	84,668
VACAR	96,913	97,161	99,926	101,270	102,268	101,169	102,832	109,369	109,919	113,168	119,406
SERC	270,584	294,761	301,659	322,313	331,300	331,486	340,049	354,950	364,363	378,406	389,455
GROUP A	17,135	20,280	22,071	26,446	27,638	29,167	29,136	29,635	33,782	35,219	38,265
GROUP B	33,103	37,177	39,829	43,491	47,887	48,244	51,163	52,878	55,909	55,728	58,274
GROUP C	40,270	46,016	46,753	45,500	45,335	47,274	49,106	50,529	51,627	52,789	54,586
SPP	90,508	103,473	108,653	115,437	120,860	124,685	129,405	133,042	141,318	143,736	151,125
NWPP – U.S.	42,577	46,520	56,015	60,329	63,543	68,869	71,924	72,548	74,210	75,602	78,111
RMPA	23,415	25,201	27,005	28,374	29,931	31,517	33,189	34,992	37,021	38,747	40,543
AZ-NM	39,218	41,448	40,726	41,870	42,540	45,302	48,187	49,905	51,121	53,602	57,129
CA-SNV	24,739	25,249	26,235	23,820	25,319	28,012	29,783	32,756	37,219	39,045	39,222
WSCC – U.S.	129,949	138,418	149,981	154,393	161,333	173,700	183,083	190,201	199,571	206,996	215,005

Nuclear (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	22,167	22,171	42,201	51,644	55,575	66,754	71,047	80,143	86,245	87,683	89,144
ERCOT	0	0	3,936	7,205	13,162	17,421	19,994	24,500	28,023	29,226	29,892
MAAC	37,826	43,669	53,617	58,787	66,141	68,373	72,406	75,158	84,849	83,317	81,922
MAIN	35,645	39,036	53,582	66,539	76,133	78,812	79,609	80,153	79,830	80,771	81,963
MAPP – U.S.	23,549	23,666	23,354	25,315	24,821	24,304	25,131	25,176	24,712	24,787	24,964
NPCC – U.S.	40,878	49,472	54,745	62,302	66,871	77,905	82,400	83,100	84,040	84,540	85,040
SERC	102,899	115,903	139,643	149,802	160,789	182,148	190,279	189,315	196,446	199,433	197,139
SPP	7,463	11,815	21,304	24,369	31,529	33,490	37,103	39,333	40,576	41,872	41,385
WSCC – U.S.	12,836	30,087	58,452	61,919	69,488	80,606	81,970	82,496	82,413	91,648	91,989
NERC – U.S.	283,263	335,818	450,834	507,882	564,509	629,813	659,939	679,374	707,134	723,277	723,438
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	36,154	46,341	55,275	66,132	72,245	77,302	89,535	95,028	96,257	96,279	105,729
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	36,154	46,341	55,275	66,132	72,245	77,302	89,535	95,028	96,257	96,279	105,729

Nuclear (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	25,513	30,290	41,130	45,090	53,690	56,390	57,200	56,860	56,960	57,910	58,140
EAST MISSOURI	0	0	220	5,010	5,751	5,958	6,173	6,238	6,671	6,670	6,638
SO. CENT. ILL.	0	0	2,997	5,113	5,391	5,442	5,434	6,318	5,411	5,434	6,361
WUM	10,132	8,746	9,235	11,326	11,301	11,022	10,802	10,737	10,788	10,757	10,824
MAIN	35,645	39,036	53,582	66,539	76,133	78,812	79,609	80,153	79,830	80,771	81,963
NEW YORK	14,357	21,272	26,545	28,642	28,551	35,755	34,600	34,600	34,600	34,600	34,600
NEW ENGLAND	26,521	28,200	28,200	33,660	38,320	42,150	47,800	48,500	49,440	49,940	50,440
NPCC – U.S.	40,878	49,472	54,745	62,302	66,871	77,905	82,400	83,100	84,040	84,540	85,040
NEW BRUNSWICK	239	4,136	4,434	4,434	4,249	4,434	4,434	4,434	4,249	4,434	4,434
ONTARIO	35,914	40,002	48,831	59,694	65,992	70,695	81,996	86,689	88,103	87,940	97,390
QUÉBEC	1	2,203	2,010	2,004	2,004	2,173	3,105	3,905	3,905	3,905	3,905
NPCC – CANADA	36,154	46,341	55,275	66,132	72,245	77,302	89,535	95,028	96,257	96,279	105,729
FLORIDA	19,194	19,758	26,481	25,162	23,065	26,437	25,344	24,381	25,341	25,220	24,453
SOUTHERN	17,117	18,427	20,430	19,337	20,407	27,045	26,651	31,368	32,285	31,430	32,292
TVA	26,816	24,795	31,602	36,640	42,659	48,517	52,109	52,963	53,887	54,281	54,613
VACAR	39,772	52,923	61,130	68,663	74,658	80,149	84,175	80,603	84,933	88,502	85,781
SERC	102,899	115,903	139,643	149,802	160,789	182,148	190,279	189,315	196,446	199,433	197,139
GROUP A	7,463	11,815	21,304	20,669	25,913	27,521	30,789	32,907	34,149	35,376	34,865
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	3,700	5,616	5,969	6,314	6,426	6,427	6,496	6,520
SPP	7,463	11,815	21,304	24,369	31,529	33,490	37,103	39,333	40,576	41,872	41,385
NWPP – U.S.	8,479	10,840	17,659	16,250	18,580	25,106	26,080	25,570	25,570	34,751	34,934
RMPA	505	975	1,030	994	1,272	1,445	1,449	1,445	1,445	1,445	1,445
AZ-NM	0	0	4,764	9,857	12,825	15,641	16,231	16,964	16,984	16,944	17,091
CA-SNV	3,852	18,272	34,999	34,818	36,811	38,414	38,210	38,517	38,414	38,508	38,519
WSCC – U.S.	12,836	30,087	58,452	61,919	69,488	80,606	81,970	82,496	82,413	91,648	91,989

continued

Hydro[c] (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	2,317	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324
ERCOT	379	303	303	303	305	312	312	312	312	312	312
MAAC	3,273	3,537	3,537	3,574	3,694	3,694	3,771	3,770	3,770	3,770	3,770
MAIN	2,467	2,250	2,259	2,270	2,270	2,270	2,271	2,271	2,270	2,277	2,277
MAPP – U.S.	12,777	13,418	13,631	13,650	13,630	13,436	13,513	13,520	13,522	13,530	13,543
NPCC – U.S.	31,006	27,285	27,601	27,691	27,739	27,881	27,969	28,018	28,035	28,091	28,270
SERC	35,574	30,434	30,805	31,135	31,237	31,263	33,750	33,806	33,806	33,806	33,816
SPP	5,642	5,580	5,579	5,642	5,650	5,650	5,649	5,650	5,650	5,650	5,650
WSCC – U.S.	216,553[c]	161,991	161,153	164,409	164,758	162,036	165,872	166,192	166,796	164,135	170,457
NERC – U.S.	309,988	247,122	247,192	250,998	251,607	248,866	255,431	255,863	256,485	253,895	260,419
MAPP – CANADA	22,184	24,101	22,941	23,104	23,792	23,812	23,831	23,509	23,312	23,679	25,199
NPCC – CANADA	115,587	121,422	135,212	145,184	154,677	164,318	167,743	167,263	166,988	167,736	168,715
WSCC – CANADA	41,283	39,045	42,096	43,801	46,041	48,080	49,779	47,842	49,489	51,871	54,628
NERC – CANADA	179,054	184,568	200,249	212,089	224,510	236,210	241,353	238,614	239,789	243,286	248,542

Hydro[c] (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	12	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	926	926	926	926	926	926	926	926	926	926	926
SO. CENT. ILL.	8	10	10	10	10	10	10	10	10	10	10
WUM	1,521	1,314	1,323	1,334	1,334	1,334	1,335	1,335	1,334	1,341	1,341
MAIN	2,467	2,250	2,259	2,270	2,270	2,270	2,271	2,271	2,270	2,277	2,277
NEW YORK	26,368	23,745	23,991	24,071	24,119	24,261	24,349	24,398	24,415	24,471	24,650
NEW ENGLAND	4,638	3,540	3,610	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620
NPCC – U.S.	31,006	27,285	27,601	27,691	27,739	27,881	27,969	28,018	28,035	28,091	28,270
NEW BRUNSWICK	2,404	2,685	2,702	2,752	2,752	2,752	2,752	2,752	2,752	2,752	2,752
ONTARIO	34,597	35,159	35,165	35,030	35,030	35,030	35,010	34,915	34,915	34,924	34,914
QUÉBEC	78,586	83,578	97,345	107,402	116,895	126,536	129,981	129,596	129,321	130,060	131,049
NPCC – CANADA	115,587	121,422	135,212	145,184	154,677	164,318	167,743	167,263	166,988	167,736	168,715
FLORIDA	203	227	227	243	254	254	254	254	254	254	254
SOUTHERN	9,499	6,966	7,206	7,444	7,535	7,535	10,027	10,083	10,083	10,083	10,093
TVA	19,915	17,732	17,732	17,732	17,732	17,732	17,732	17,732	17,732	17,732	17,732
VACAR	5,957	5,509	5,640	5,716	5,716	5,742	5,737	5,737	5,737	5,737	5,737
SERC	35,574	30,434	30,805	31,135	31,237	31,263	33,750	33,806	33,806	33,806	33,816
GROUP A	176	167	166	167	167	167	166	167	167	167	167
GROUP B	5,403	5,353	5,353	5,415	5,423	5,423	5,423	5,423	5,423	5,423	5,423
GROUP C	63	60	60	60	60	60	60	60	60	60	60
SPP	5,642	5,580	5,579	5,642	5,650	5,650	5,649	5,650	5,650	5,650	5,650
NWPP – U.S.	152,250[c]	121,390	119,729	122,865	123,005	119,805	123,072	123,083	123,455	120,406	126,437
RMPA	9,912	9,137	9,125	9,167	9,195	9,220	9,226	9,208	9,190	9,171	9,152
AZ-NM	2,364	2,536	2,469	2,459	2,478	2,499	2,521	2,537	2,557	2,571	2,590
CA-SNV	52,027[c]	28,928	29,830	29,918	30,080	30,512	31,053	31,364	31,594	31,987	32,278
WSCC – U.S.	216,553	161,991	161,153	164,409	164,758	162,036	165,872	166,192	166,796	164,135	170,457

Pumped Storage Load (–) (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	2,399	2,927	2,927	2,927	3,669	3,810	3,810	3,810	3,810	3,810	3,810
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	2,362	1,848	2,118	2,394	2,391	2,586	2,469	2,579	2,358	2,528	2,585
MAIN	32	103	160	169	118	120	105	82	111	114	124
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	4,903	2,915	3,220	3,320	3,860	3,960	3,990	4,260	4,868	5,720	5,720
SERC	3,348	3,239	3,673	4,412	5,507	7,948	6,572	6,541	6,497	7,145	7,452
SPP	149	107	117	123	0	0	0	0	0	0	0
WSCC – U.S.	2,055	1,249	1,388	1,572	1,704	2,153	2,414	2,392	2,175	2,244	2,410
NERC – U.S.	15,248	12,388	13,603	14,917	17,249	20,577	19,360	19,664	19,819	21,561	22,101
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	70	0	0	0	0	0	0	0	0	0	30
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	70	0	0	0	0	0	0	0	0	0	30

Pumped Storage Load (–) (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	32	103	160	169	118	120	105	82	111	114	124
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	32	103	160	169	118	120	105	82	111	114	124
NEW YORK	3,152	1,460	1,460	1,460	1,460	1,460	1,460	1,460	2,068	2,920	2,920
NEW ENGLAND	1,751	1,455	1,760	1,860	2,400	2,500	2,530	2,800	2,800	2,800	2,800
NPCC – U.S.	4,903	2,915	3,220	3,320	3,860	3,960	3,990	4,260	4,868	5,720	5,720
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	70	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	30
NPCC – CANADA	70	0	0	0	0	0	0	0	0	0	30
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	327	669	669	669	669	2,369	977	463	745	1,069	723
TVA	1,603	1,301	1,499	1,367	1,359	1,242	1,318	1,249	1,361	1,463	1,753
VACAR	1,418	1,269	1,505	2,376	3,479	4,338	4,277	4,829	4,391	4,613	4,976
SERC	3,348	3,239	3,673	4,412	5,507	7,948	6,572	6,541	6,497	7,145	7,452
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	149	107	117	123	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	149	107	117	123	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	232	486	599	672	673	678	698	703	703	703	703
AZ-NM	280	263	242	206	205	214	218	213	196	189	320
CA-SNV[d]	1,543	500	547	694	826	1,261	1,498	1,476	1,276	1,352	1,387
WSCC – U.S.	2,055	1,249	1,388	1,572	1,704	2,153	2,414	2,392	2,175	2,244	2,410

Pumped Storage Output (+) (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	1,870	1,951	1,951	1,951	2,246	2,540	2,540	2,540	2,540	2,540	2,540
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	1,599	1,291	1,477	1,674	1,673	1,811	1,727	1,807	1,649	1,770	1,809
MAIN	9	54	85	89	61	64	55	44	58	60	65
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	3,261	2,052	2,282	2,352	2,732	2,802	2,822	3,022	3,448	4,045	4,045
SERC	2,600	2,435	2,765	3,335	4,181	6,073	5,020	5,006	4,968	5,472	5,717
SPP	75	67	73	77	0	0	0	0	0	0	0
WSCC – U.S.	1,707	1,196	1,324	1,399	1,561	2,021	2,352	2,336	2,185	2,233	2,349
NERC – U.S.	11,121	9,046	9,957	10,877	12,454	15,311	14,516	14,755	14,848	16,120	16,525
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Pumped Storage Output (+) (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	9	54	85	69	61	64	55	44	58	60	65
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	9	54	85	89	61	64	55	44	58	60	65
NEW YORK	2,023	1,022	1,022	1,022	1,022	1,022	1,022	1,022	1,448	2,045	2,045
NEW ENGLAND	1,238	1,030	1,260	1,330	1,710	1,780	1,800	2,000	2,000	2,000	2,000
NPCC – U.S.	3,261	2,052	2,282	2,352	2,732	2,802	2,822	3,022	3,448	4,045	4,045
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	246	503	503	503	503	1,810	745	354	568	812	551
TVA	1,255	1,007	1,161	1,059	1,046	962	1,021	968	1,054	1,133	1,358
VACAR	1,099	925	1,101	1,773	2,632	3,301	3,254	3,684	3,346	3,527	3,808
SERC	2,600	2,435	2,765	3,335	4,181	6,073	5,020	5,006	4,968	5,472	5,717
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	75	67	73	77	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	75	67	73	77	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	144	262	340	378	378	381	391	394	394	394	394
AZ-NM	196	184	169	144	144	150	153	149	137	132	224
CA-SNV[d]	1,367	750	815	877	1,039	1,490	1,808	1,793	1,654	1,707	1,731
WSCC – U.S.	1,707	1,196	1,324	1,399	1,561	2,021	2,352	2,336	2,185	2,233	2,349

continued

Geothermal (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	4,844	8,793	9,576	11,037	12,618	13,349	14,450	16,949	17,814	18,457	18,677
NERC – U.S.	4,844	8,793	9,576	11,037	12,618	13,349	14,450	16,949	17,814	18,457	18,677
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Geothermal (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	99	137	137	137	137	137	137	137	138
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	4,844	8,793	9,477	10,900	12,481	13,212	14,313	16,812	17,677	18,320	18,539
WSCC – U.S.	4,844	8,793	9,576	11,037	12,618	13,349	14,450	16,949	17,814	18,457	18,677

continued

Oil – Steam (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	1,640	1,641	1,492	1,468	1,468	1,468	1,495	1,558	1,629	1,641	1,534
ERCOT	979	376	377	1,739	378	2,826	2,833	2,289	2,942	2,643	2,090
MAAC	15,235	15,254	10,368	8,838	7,879	7,668	7,648	7,351	6,363	7,707	11,735
MAIN	4,039	4,474	3,231	2,306	1,290	1,102	1,271	1,874	2,458	2,801	3,337
MAPP – U.S.	113	98	89	94	108	138	109	126	158	176	164
NPCC – U.S.	65,641	67,764	58,365	55,086	49,566	38,359	31,203	28,360	30,796	33,565	38,330
SERC	34,525	31,482	24,452	19,551	19,463	20,050	22,220	24,940	25,846	27,601	30,562
SPP	1,328	2,655	1,798	1,701	2,399	3,266	3,563	2,684	2,719	2,748	2,758
WSCC – U.S.	9,487	15,818	15,346	16,457	18,747	19,599	19,429	18,808	21,067	18,806	20,793
NERC – U.S.	132,987	139,562	115,518	107,240	101,298	94,476	89,771	87,990	93,978	97,688	111,303
MAPP – CANADA	21	35	20	20	20	20	20	30	45	40	40
NPCC – CANADA	3,860	1,447	1,494	1,296	1,304	1,361	1,421	1,540	1,736	1,813	1,971
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	3,881	1,482	1,514	1,316	1,324	1,381	1,441	1,570	1,781	1,853	2,011

Oil – Steam (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	3,839	4,170	2,980	2,080	1,000	830	970	1,560	2,100	2,390	2,850
EAST MISSOURI	96	24	21	140	154	140	149	147	150	144	143
SO. CENT. ILL.	13	177	108	79	128	116	127	133	175	226	287
WUM	91	103	122	7	8	16	25	34	33	41	57
MAIN	4,039	4,474	3,231	2,306	1,290	1,102	1,271	1,874	2,458	2,801	3,337
NEW YORK	32,519	31,209	22,308	24,573	22,727	16,894	15,451	11,340	12,098	12,429	13,779
NEW ENGLAND	33,122	36,555	36,057	30,513	26,839	21,465	15,752	17,020	18,698	21,136	24,551
NPCC – U.S.	65,641	67,764	58,365	55,086	49,566	38,359	31,203	28,360	30,796	33,565	38,330
NEW BRUNSWICK	3,641	1,347	1,394	1,196	1,204	1,261	1,321	1,386	1,447	1,475	1,574
ONTARIO	167	0	0	0	0	0	0	0	0	0	0
QUÉBEC	52	100	100	100	100	100	100	154	289	338	397
NPCC – CANADA	3,860	1,447	1,494	1,296	1,304	1,361	1,421	1,540	1,736	1,813	1,971
FLORIDA	32,687	28,457	22,580	15,933	17,143	17,321	19,816	20,132	21,044	22,527	24,002
SOUTHERN	59	70	109	541	457	211	50	50	63	68	30
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	1,779	2,955	1,763	3,077	1,863	2,518	2,354	4,758	4,739	5,006	6,530
SERC	34,525	31,482	24,452	19,551	19,463	20,050	22,220	24,940	25,846	27,601	30,562
GROUP A	1,083	2,558	1,660	1,502	2,193	3,041	3,340	2,440	2,483	2,508	2,516
GROUP B	86	29	65	66	71	69	69	69	69	69	69
GROUP C	159	68	73	133	135	156	154	175	167	171	173
SPP	1,328	2,655	1,798	1,701	2,399	3,266	3,563	2,684	2,719	2,748	2,758
NWPP – U.S.	110	0	0	0	0	0	0	105	105	105	105
RMPA	38	95	95	105	107	113	112	120	127	134	142
AZ-NM	346	657	848	813	912	927	941	1,147	1,144	890	733
CA-SNV	8,993	15,066	14,403	15,539	17,728	18,559	18,376	17,436	19,691	17,677	19,813
WSCC – U.S.	9,487	15,818	15,346	16,457	18,747	19,599	19,429	18,808	21,067	18,806	20,793

Oil – Combustion Turbine* (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	92	211	399	568	719	855	975	1,084	1,181	1,288	1,389
ERCOT	26	0	0	0	0	1	0	0	0	0	0
MAAC	478	128	70	57	60	50	58	47	44	61	102
MAIN	47	143	167	97	97	131	212	378	529	732	954
MAPP – U.S.	13	32	41	71	96	156	139	223	354	289	247
NPCC – U.S.	225	281	108	112	116	300	347	235	153	128	127
SERC	372	690	647	1,871	1,530	975	641	872	1,217	1,510	1,942
SPP	22	54	66	139	252	197	321	577	704	1,823	2,039
WSCC – U.S.	112	235	281	346	361	387	619	884	578	570	461
NERC – U.S.	1,387	1,774	1,779	3,261	3,231	3,052	3,312	4,300	4,760	6,401	7,261
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	14	18	18	27	24	25	0	7	39	83	166
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	14	18	18	27	24	25	0	7	39	83	166

Oil – Combustion Turbine* (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	34	80	60	30	10	10	10	20	30	50	70
EAST MISSOURI	3	17	17	16	17	17	17	16	47	18	19
SO. CENT. ILL.	-6[1]	9	5	3	4	6	5	6	7	9	11
WUM	16	37	85	48	66	98	180	336	445	655	854
MAIN	47	143	167	97	97	131	212	378	529	732	954
NEW YORK	150	206	33	42	46	250	297	185	103	78	77
NEW ENGLAND	75	75	75	70	70	50	50	50	50	50	50
NPCC – U.S.	225	281	108	112	116	300	347	235	153	128	127
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	14	18	18	27	24	25	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	7	39	83	166
NPCC – CANADA	14	18	18	27	24	25	0	7	39	83	166
FLORIDA	266	302	309	242	267	285	310	305	312	319	392
SOUTHERN	19	71	152	1,231	1,004	422	47	18	39	78	57
TVA	34	119	48	47	49	79	102	160	254	385	579
VACAR	53	198	138	351	210	189	182	389	612	728	914
SERC	372	690	647	1,871	1,530	975	641	872	1,217	1,510	1,942
GROUP A	3	8	3	3	5	10	12	18	15	39	40
GROUP B	0	0	0	0	0	0	0	313	387	1,408	1,536
GROUP C	19	46	63	136	247	187	309	246	302	376	463
SPP	22	54	66	139	252	197	321	577	704	1,823	2,039
NWPP – U.S.	0	0	0	0	0	0	0	219	219	219	0
RMPA	6	19	14	38	43	43	40	29	34	35	15
AZ-NM	1	17	13	108	95	106	99	96	85	76	104
CA-SNV	105	199	254	200	223	238	480	540	240	240	342
WSCC – U.S.	112	235	281	346	361	387	619	884	578	570	461

continued

Oil – Combined Cycle (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	16	23	43	61	77	92	105	116	127	136	144
ERCOT	5	3	2	3	2	1	1	1	1	1	1
MAAC	215	114	75	57	51	40	40	34	27	32	48
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	338	400	400	400	400	400	400	500	600	800	800
SERC	284	0	0	0	0	0	0	0	0	0	0
SPP	5	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	22	161	201	336	278	375	334	288	317	316	372
NERC – U.S.	885	701	721	857	806	908	880	939	1,072	1,285	1,365
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Oil – Combined Cycle (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	338	400	400	400	400	400	400	500	600	800	800
NPCC – U.S.	338	400	400	400	400	400	400	500	600	800	800
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	284	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	284	0	0	0	0	0	0	0	0	0	0
GROUP A	5	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	5	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	13	150	188	323	265	363	322	277	308	307	362
CA-SNV	9	11	13	13	13	12	12	11	9	9	10
WSCC – U.S.	22	161	201	336	278	375	334	288	317	316	372

continued

Gas – Steam (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	18	25	25	278	278	152	25	25	25	25	25
ERCOT	92,476	97,272	102,775	102,368	100,156	97,382	97,720	94,691	93,532	93,550	93,348
MAAC	5,194	5,542	4,245	3,399	3,261	3,082	3,117	2,505	2,696	2,536	602
MAIN	499	517	269	104	106	90	74	100	103	63	87
MAPP – U.S.	241	157	64	57	110	118	103	126	159	81	58
NPCC – U.S.	15,388	8,133	7,122	924	883	760	0	0	0	0	0
SERC	16,643	12,032	10,872	9,589	9,519	8,203	6,841	6,772	6,577	6,451	6,102
SPP	95,162	93,382	90,864	79,589	78,719	79,156	78,885	79,657	77,721	79,248	81,113
WSCC – U.S.	54,017	79,521	62,879	60,060	55,396	51,813	50,951	50,378	47,364	49,385	44,332
NERC – U.S.	279,638	296,581	279,115	256,368	248,428	240,756	237,716	234,254	228,177	231,339	225,667
MAPP – CANADA	422	215	170	190	120	130	140	180	170	160	170
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	2,978	2,400	2,559	2,913	2,926	2,403	2,425	5,794	5,738	5,675	5,647
NERC – CANADA	3,400	2,615	2,729	3,103	3,046	2,533	2,565	5,974	5,908	5,835	5,817

Gas – Steam (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	280	50	40	40	40	0	0	0	0	0	0
EAST MISSOURI	49	122	126	6	6	6	6	6	6	6	6
SO. CENT. ILL.	-4	84	54	51	53	72	51	69	96	56	80
WUM	174	261	49	7	7	12	17	25	1	1	1
MAIN	499	517	269	104	106	90	74	100	103	63	87
NEW YORK	14,097	8,133	7,122	924	883	760	0	0	0	0	0
NEW ENGLAND	1,291	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	15,388	8,133	7,122	924	883	760	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	16,031	11,317	10,179	8,410	8,310	7,231	6,314	6,279	6,215	6,169	5,843
SOUTHERN	393	440	501	877	944	732	442	412	280	222	198
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	219	275	192	302	265	240	85	81	82	60	61
SERC	16,643	12,032	10,872	9,589	9,519	8,203	6,841	6,772	6,577	6,451	6,102
GROUP A	55,444	56,175	52,459	43,198	42,369	43,234	43,162	45,707	43,607	44,114	46,180
GROUP B	35,127	33,705	35,281	33,782	33,874	33,322	33,462	31,575	31,535	32,279	32,022
GROUP C	4,591	3,502	3,124	2,609	2,476	2,600	2,261	2,375	2,579	2,855	2,911
SPP	95,162	93,382	90,864	79,589	78,719	79,156	78,885	79,657	77,721	79,248	81,113
NWPP – U.S.	640	32	341	350	350	350	384	827	1,038	1,113	1,149
RMPA	447	700	640	668	676	698	703	733	773	741	854
AZ-NM	4,541	5,168	3,852	2,689	2,740	1,964	2,085	1,891	1,985	2,396	2.105
CA-SNV	48,389	73,621	58,046	56,353	51,630	48,801	47,779	46,927	43,568	45,135	40,224
WSCC – U.S.	54,017	79,521	62,879	60,060	55,396	51,813	50,951	50,378	47,364	49,385	44,332

Gas – Combustion Turbine* (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	135	197	355	481	582	663	728	780	821	855	881
ERCOT	436	32	73	53	71	73	212	213	248	279	316
MAAC	722	393	180	116	112	95	115	83	74	87	120
MAIN	260	362	274	128	85	79	92	129	185	218	326
MAPP – U.S.	8	52	48	48	38	46	47	47	48	46	47
NPCC – U.S.	70	25	20	25	30	30	0	0	0	0	0
SERC	656	1,608	1,823	1,729	1,782	2,013	990	870	748	854	607
SPP	148	224	244	226	284	254	265	290	297	360	385
WSCC – U.S.	370	689	929	896	1,337	1,866	1,967	1,966	1,762	1,747	1,689
NERC – U.S.	2,805	3,582	3,946	3,702	4,321	5,119	4,416	4,378	4,183	4,446	4,371
MAPP – CANADA	61	55	45	30	20	20	20	20	50	75	50
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	685	817	893	874	873	813	817	815	803	798	800
NERC – CANADA	746	872	938	904	893	833	837	835	853	873	850

Gas – Combustion Turbine* (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	214	250	180	90	40	30	40	70	110	140	220
EAST MISSOURI	1	1	1	1	1	1	1	1	1	1	1
SO. CENT. ILL.	11	64	39	27	34	33	34	35	44	39	53
WUM	34	47	54	10	10	15	17	23	30	38	52
MAIN	260	362	274	128	85	79	92	129	185	218	326
NEW YORK	48	25	20	25	30	30	0	0	0	0	0
NEW ENGLAND	22	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	70	25	20	25	30	30	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	375	1,361	1,541	1,450	1,461	1,704	881	753	649	592	545
SOUTHERN	255	238	241	247	238	240	6	6	6	6	6
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	26	9	41	32	83	69	103	111	93	256	56
SERC	656	1,608	1,823	1,729	1,782	2,013	990	870	748	854	607
GROUP A	24	50	71	48	72	53	46	48	52	67	87
GROUP B	55	29	30	29	30	27	27	48	27	67	65
GROUP C	69	145	143	149	182	174	192	194	218	226	233
SPP	148	224	244	226	284	254	265	290	297	360	385
NWPP – U.S.	10	0	64	65	65	65	193	193	193	193	193
RMPA	54	172	109	331	382	376	352	254	294	250	110
AZ-NM	190	116	205	76	267	515	522	503	566	502	410
CA-SNV	116	401	551	424	623	910	900	1,016	709	802	976
WSCC – U.S.	370	689	929	896	1,337	1,866	1,967	1,966	1,762	1,747	1,689

Gas – Combined Cycle (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	3,800	4,091	4,003	3,977	3,972	3,681	3,892	3,940	3,947	3,964	3,830
MAAC	368	1,026	674	517	456	361	357	302	241	287	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	4	0	0	0	0	0	0	0	0	1	4
NPCC – U.S.	221	0	0	0	0	0	0	0	0	0	0
SERC	277	1,478	725	1,123	1,292	1,068	1,113	1,028	1,087	1,041	1,347
SPP	3,961	3,126	3,384	3,435	2,814	3,059	3,233	3,238	3,451	3,542	3,653
WSCC – U.S.	3,006	4,866	4,843	4,938	4,910	4,619	4,675	5,175	5,221	5,162	5,101
NERC – U.S.	11,637	14,589	13,629	13,990	13,444	12,788	13,270	13,683	13,947	13,997	13,935
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Gas – Combined Cycle (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	221	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	221	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	277	1,478	725	1,123	1,292	1,068	1,113	1,028	1,087	1,041	1,347
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	277	1,478	725	1,123	1,292	1,068	1,113	1,028	1,087	1,041	1,347
GROUP A	1,416	444	516	668	322	351	368	379	365	338	420
GROUP B	2,539	2,678	2,859	2,753	2,474	2,683	2,835	2,828	3,058	3,176	3,214
GROUP C	6	6	9	14	18	25	30	31	28	28	19
SPP	3,961	3,128	3,384	3,435	2,814	3,059	3,233	3,238	3,451	3,542	3,653
NWPP – U.S.	2	74	482	480	480	480	480	937	937	937	906
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	1,029	1,710	1,125	833	786	525	601	667	754	701	652
CA-SNV	1,975	3,082	3,236	3,625	3,644	3,614	3,594	3,571	3,530	3,524	3,543
WSCC – U.S.	3,006	4,866	4,843	4,938	4,910	4,619	4,675	5,175	5,221	5,162	5,101

Other (Million kWh)

Regional Table 15

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT[h]	0	1	4	3	5	163	319	314	340	376	412
MAAC	1,017[i]	1,042[i]	966[i]	1,360[i]	1,741[i]	2,079[k]	2,410[k]	2,405[k]	2,405[k]	2,405[k]	2,412[k]
MAIN[l]	685	431	447	582	623	684	752	816	808	882	884
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	60	232	468	684	781	781	840	889	1,030	1,133	1,133
SERC	4,345	2,290	2,689	3,271	4,299	4,522	3,643	4,531	4,639	5,070	4,979
SPP	896	896	889	889	889	1,947	1,947	2,958	2,998	3,750	5,054
WSCC – U.S.	1,643	5,984	7,814	10,744	12,381	15,024	15,825	17,605	19,729	21,276	23,299
NERC – U.S.	8,646	10,876	13,277	17,533	20,719	25,200	25,736	29,518	31,949	34,892	38,173
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA[o]	0	0	0	0	0	0	276	372	522	746	603
WSCC – CANADA	1,156	1,200	0	106	107	27	28	23	20	26	39
NERC – CANADA	1,156	1,200	0	106	107	27	304	395	542	772	642

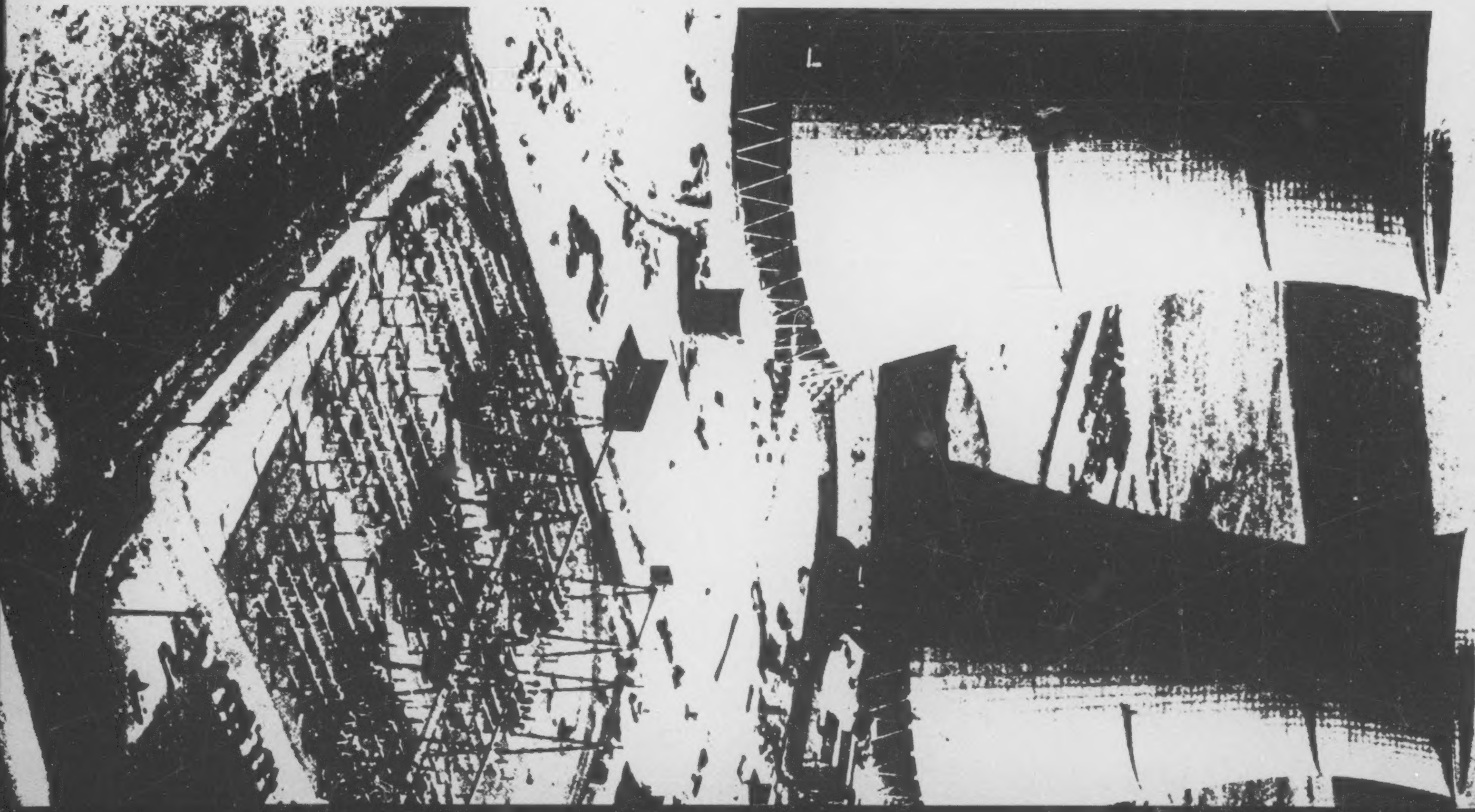
Other (Million kWh)

Subregional Table 15

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI[m]	676	414	430	430	422	422	427	430	423	428	430
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM[n]	9	17	17	152	201	262	325	386	385	454	454
MAIN	685	431	447	582	623	684	752	816	808	882	884
NEW YORK	0	172	188	384	481	481	540	589	730	833	833
NEW ENGLAND	60	60	280	300	300	300	300	300	300	300	300
NPCC – U.S.	60	232	468	684	781	781	840	889	1,030	1,133	1,133
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO[o]	0	0	0	0	0	0	276	372	522	746	603
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	276	372	522	746	603
FLORIDA	3,105	1,375	1,642	2,013	2,230	2,441	2,564	3,443	3,571	3,765	3,888
SOUTHERN	326	195	301	473	1,095	810	0	0	0	0	0
TVA	477	0	0	0	0	0	0	0	0	0	0
VACAR	437	720	746	785	974	1,271	1,079	1,088	1,068	1,305	1,091
SERC	4,345	2,290	2,689	3,271	4,299	4,522	3,643	4,531	4,639	5,070	4,979
GROUP A	649	653	653	653	653	653	653	653	653	653	653
GROUP B	247	243	236	236	236	1,294	1,294	2,305	2,345	3,097	4,401
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	896	896	889	889	889	1,947	1,947	2,958	2,998	3,750	5,054
NWPP – U.S.	270	401	635	636	931	1,015	1,149	1,602	1,740	1,871	1,876
RMPA	4	36	36	36	36	36	36	36	36	104	105
AZ-NM	123	1,326	1,984	3,021	2,949	2,703	2,096	2,480	3,190	2,778	2,446
CA-SNV	1,246	4,219	5,159	6,851	8,465	11,270	12,544	13,487	14,763	16,523	18,872
WSCC – U.S.	1,643	5,984	7,814	10,744	12,381	15,024	15,825	17,605	19,729	21,276	23,299

FOOTNOTES TO TABLE 15

a/ Although Québec exports electric energy to the U.S., it imports much more energy from Churchill Falls in Labrador, becoming a net *importer* of electric energy. Because Churchill Falls is not a NERC member, this results in NERC-Canada being a net importer, while Canada as a whole is a net exporter of electric energy to the U.S.
b/ Total generation less pumped storage load.
c/ Adverse hydro is assumed for forecast years. Data for actual year can be greater than for forecast years if median hydro occurred.
d/ Pumped storage output is greater than input due to a pumped storage facility being in combination with a California reservoir which cannot be disaggregated.
e/ Includes diesel.
f/ In 1982, auxiliary power requirement of oil-fired combustion turbines exceeded gross electrical output.
g/ In 1982, auxiliary power requirement of gas-fired steam units exceeded gross electrical output.
h/ Includes refuse.
i/ Includes Beth Steel & Del City 1, 2, & 3.
j/ Includes BC & PS Trashburner Units.
k/ Del City 1, 2, & 3 drop out.
l/ Difference between adverse hydro and median hydro, and small, cogeneration, and wood-fired steam units.
m/ Difference between adverse hydro and median hydro.
n/ Small, cogeneration, and wood-fired steam units.
o/ Parallel generation.



Net Electrical Energy Generation
by Region

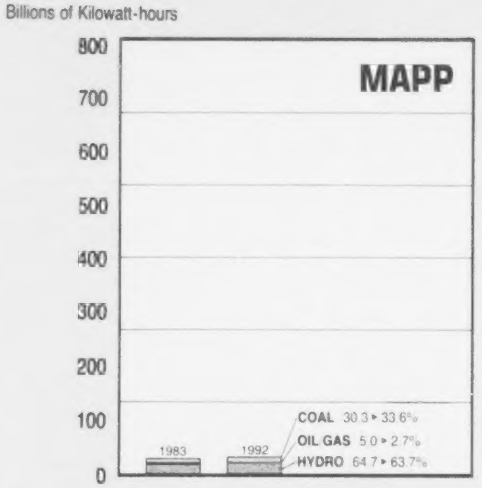
The *Net Electrical Energy Generation* data include the annual energy projected to be generated by the NERC regions, categorized by principal fuel sources. Also included is a tabulation of scheduled energy imports and exports to provide a tabulated total net energy available for load.

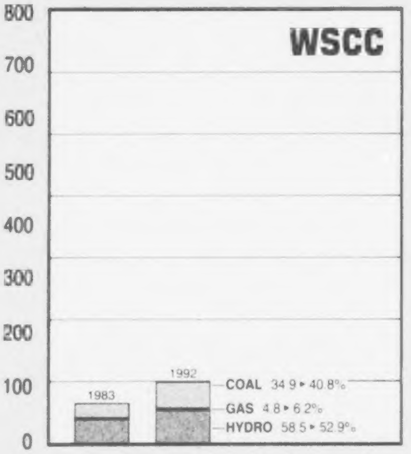
The Electric Generation data presented in Table 16 assume that the plans for the Installed Generating Capability, as tabulated for the various NERC regions in Table 14, will be realized on schedule.

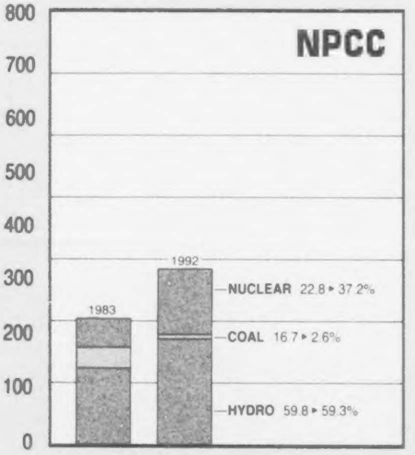
U.S. utilities are forecasting net electrical energy requirements for 1983-1992 which, in the aggregate, result in an average annual growth rate of 3.2%. Last year's ten-year forecast rate in the U.S. was 3.3%. Canadian utilities are forecasting a growth rate for 1983-1992 of 3.7%, down from the 5.1% ten-year rate forecast last year in Canada.

Even though many of the NERC regions are projecting a lower growth rate than in past years, based on this year's projections the industry will require 39% more electric energy ten years from now. The charts on these pages show, by NERC region, the growth of generation expected to provide this energy by 1992.

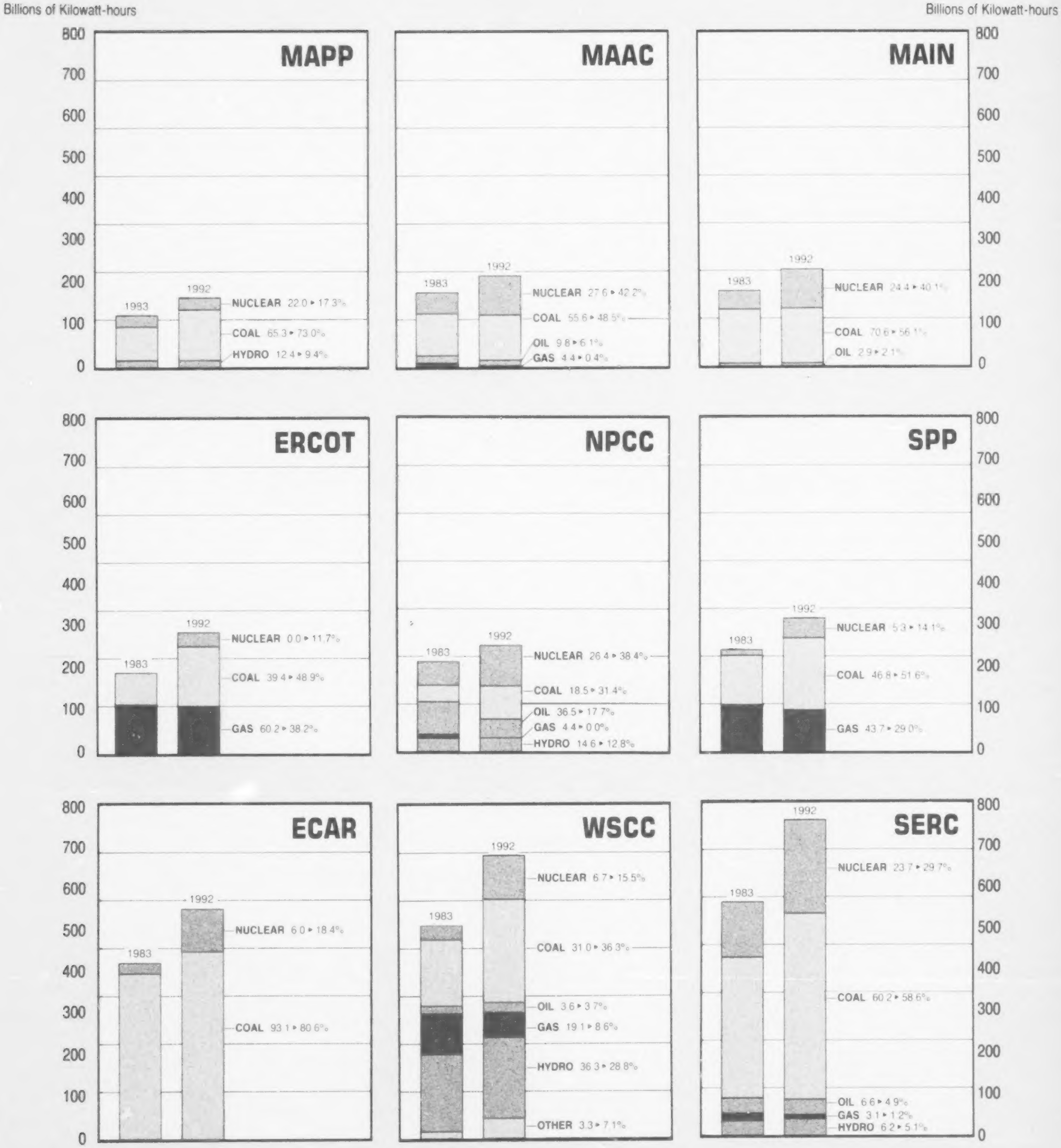
(Canada)*







(U.S.)*



*The difference between the sum of the parts and 100% represents the share by sources not shown, including net pumped storage requirements.

NERC-U.S. (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	1,184,868	1,254,910	1,279,194	1,330,994	1,367,706	1,398,021	1,450,734	1,506,263	1,546,849	1,601,485	1,655,952
NUCLEAR	283,263	335,818	450,834	507,882	564,509	629,813	659,939	679,374	707,134	723,277	723,438
HYDRO	309,988	247,122	247,192	250,998	251,607	248,866	255,431	255,863	256,485	253,895	260,419
PS LOAD (–)	15,248	12,388	13,603	14,917	17,249	20,577	19,360	19,664	19,819	21,561	22,101
PS OUTPUT (+)	11,121	9,046	9,957	10,877	12,454	15,311	14,516	14,755	14,848	16,120	16,525
GEOTHERMAL	4,844	8,793	9,576	11,037	12,618	13,349	14,450	16,949	17,814	18,457	18,677
OIL – STEAM	132,987	139,562	115,518	107,240	101,298	94,476	89,771	87,990	93,978	97,688	111,303
OIL – CT	1,387	1,774	1,779	3,261	3,231	3,052	3,312	4,300	4,760	6,401	7,261
OIL – CC	885	701	721	857	808	908	880	939	1,072	1,285	1,365
GAS – STEAM	279,638	296,581	279,115	256,368	248,428	240,756	237,716	234,254	228,177	231,339	225,667
GAS – CT	2,805	3,582	3,946	3,702	4,321	5,119	4,416	4,378	4,183	4,446	4,371
GAS – CC	11,637	14,589	13,629	13,990	13,444	12,788	13,270	13,683	13,947	13,997	13,935
OTHER	8,646	10,876	13,277	17,533	20,719	25,200	25,736	29,518	31,949	34,892	38,173
NET GENERATION	2,216,821	2,310,966	2,411,135	2,499,822	2,583,894	2,667,082	2,750,811	2,828,602	2,901,377	2,981,721	3,054,985
IMPORT–EXPORT	41,923	40,451	39,267	50,884	43,206	46,334	49,742	54,169	57,008	57,501	68,479
NET FOR LOAD	2,258,744	2,351,417	2,450,402	2,550,706	2,627,100	2,713,416	2,800,553	2,882,771	2,958,385	3,039,222	3,123,464

NERC-Canada (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	62,156	64,539	63,630	59,396	58,648	60,310	56,170	59,044	62,070	66,840	61,640
NUCLEAR	36,154	46,341	55,275	66,132	72,245	77,302	89,535	95,028	96,257	96,279	105,729
HYDRO	179,054	184,568	200,249	212,089	224,510	236,210	241,353	238,614	239,789	243,286	248,542
PS LOAD (–)	70	0	0	0	0	0	0	0	0	0	30
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	3,881	1,482	1,514	1,316	1,324	1,381	1,441	1,570	1,781	1,853	2,011
OIL – CT	14	18	18	27	24	25	0	7	39	83	166
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	3,400	2,615	2,729	3,103	3,046	2,533	2,565	5,974	5,908	5,835	5,817
GAS – CT	746	872	938	904	893	833	837	835	853	873	850
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	1,156	1,200	0	106	107	27	304	395	542	772	642
NET GENERATION	286,491	301,635	324,353	343,073	360,797	378,621	392,205	401,467	407,239	415,821	425,367
IMPORT–EXPORT	4,688	1,747	-3,560	-7,081	-9,186	-14,779	-16,492	-14,942	-9,513	-6,048	-3,392
NET FOR LOAD	291,179	303,382	320,793	335,992	351,611	363,842	375,713	386,525	397,726	409,773	421,975

ECAR (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	347,164	345,831	339,534	353,317	360,164	360,329	369,152	371,539	374,091	381,088	391,620
NUCLEAR	22,167	22,171	42,201	51,644	55,575	66,754	71,047	80,143	86,245	87,683	89,144
HYDRO	2,317	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324
PS LOAD (–)	2,399	2,927	2,927	2,927	3,669	3,810	3,810	3,810	3,810	3,810	3,810
PS OUTPUT (+)	1,870	1,951	1,951	1,951	2,246	2,540	2,540	2,540	2,540	2,540	2,540
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	1,640	1,641	1,492	1,468	1,468	1,468	1,495	1,558	1,629	1,641	1,534
OIL - CT	92	211	399	568	719	855	975	1,084	1,181	1,288	1,389
OIL - CC	16	23	43	61	77	92	105	116	127	136	144
GAS - STEAM	18	25	25	278	278	152	25	25	25	25	25
GAS - CT	135	197	355	481	582	663	728	780	821	855	881
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	373,020	371,447	385,397	409,165	419,764	431,367	444,581	456,299	465,173	473,770	485,791
IMPORT-EXPORT	-25,929	-10,347	-6,597	-5,065	-4,764	-5,067	-4,381	-3,699	-2,473	-370	509
NET FOR LOAD	347,091	361,100	378,800	404,100	415,000	426,300	440,200	452,600	462,700	473,400	486,300

ERCOT (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	62,146	66,465	65,768	66,306	69,674	75,982	84,534	97,332	104,538	114,496	124,760
NUCLEAR	0	0	3,936	7,205	13,162	17,421	19,994	24,500	28,023	29,226	29,892
HYDRO	379	303	303	303	305	312	312	312	312	312	312
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	979	376	377	1,739	378	2,826	2,833	2,289	2,942	2,643	2,090
OIL - CT	26	0	0	0	0	1	0	0	0	0	0
OIL - CC	5	3	2	3	2	1	1	1	1	1	1
GAS - STEAM	92,476	97,272	102,775	102,368	100,156	97,382	97,720	94,691	93,532	93,550	93,348
GAS - CT	436	32	73	53	71	73	212	213	248	279	316
GAS - CC	3,800	4,091	4,003	3,977	3,972	3,681	3,892	3,940	3,947	3,964	3,830
OTHER*	0	1	4	3	5	163	319	314	340	376	412
NET GENERATION	160,247	168,543	177,241	181,957	187,725	197,842	209,817	223,592	233,883	244,847	254,961
IMPORT-EXPORT	9,522	9,480	10,113	11,809	13,307	11,823	10,890	7,913	8,680	7,759	7,968
NET FOR LOAD	169,769	178,023	187,354	193,766	201,032	209,665	220,707	231,505	242,563	252,606	262,929

MAAC (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	85,799	87,819	69,091	89,813	88,078	89,163	89,129	91,579	87,589	91,197	94,048
NUCLEAR	37,826	43,668	53,617	58,787	66,141	68,373	72,406	75,158	84,849	83,317	81,922
HYDRO	3,273	3,537	3,537	3,574	3,694	3,694	3,771	3,770	3,770	3,770	3,770
PS LOAD (–)	2,362	1,848	2,118	2,394	2,391	2,586	2,469	2,579	2,358	2,528	2,585
PS OUTPUT (+)	1,599	1,291	1,477	1,674	1,673	1,811	1,727	1,807	1,649	1,770	1,809
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	15,235	15,254	10,368	8,838	7,879	7,668	7,648	7,351	6,363	7,707	11,735
OIL – CT	478	128	70	57	60	50	58	47	44	61	102
OIL – CC	215	114	75	57	51	40	40	34	27	32	48
GAS – STEAM	5,194	5,542	4,245	3,399	3,261	3,082	3,117	2,505	2,696	2,536	602
GAS – CT	722	393	180	116	112	95	115	83	74	87	120
GAS – CC	368	1,026	674	517	456	361	357	302	241	287	0
OTHER	1,017[b]	1,042[b]	966[b]	1,360[c]	1,741[c]	2,079[d]	2,410[d]	2,405[d]	2,405[d]	2,405[d]	2,412[d]
NET GENERATION	149,364	157,966	162,182	165,798	170,755	173,830	178,309	182,462	187,349	190,641	193,983
IMPORT–EXPORT	22,298	17,498	18,464	19,375	18,459	19,114	18,865	18,908	18,086	18,518	18,796
NET FOR LOAD	171,662	175,464	180,646	185,173	189,214	192,944	197,174	201,370	205,435	209,159	212,779

MAIN (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	105,766	113,007	107,976	105,045	102,218	103,536	105,150	107,305	110,832	113,325	114,860
NUCLEAR	35,645	39,036	53,582	66,539	76,133	78,812	79,609	80,153	79,830	80,771	81,963
HYDRO	2,467	2,250	2,259	2,270	2,270	2,270	2,271	2,271	2,270	2,277	2,277
PS LOAD (–)	32	103	160	169	118	120	105	82	111	114	124
PS OUTPUT (+)	9	54	85	89	61	64	55	44	58	60	65
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	4,039	4,474	3,231	2,306	1,290	1,102	1,271	1,874	2,458	2,801	3,337
OIL – CT	47	143	167	97	97	131	212	378	529	732	954
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	499	517	269	104	106	90	74	100	103	63	87
GAS – CT	260	362	274	128	85	79	92	129	185	218	326
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[a]	685	431	447	582	623	684	752	816	808	882	884
NET GENERATION	149,385	160,171	168,130	176,991	182,765	186,648	189,381	192,988	196,962	201,015	204,629
IMPORT–EXPORT	8,731	4,474	2,041	-1,317	-3,007	-1,841	-550	232	455	601	1,272
NET FOR LOAD	158,116	164,645	170,171	175,674	179,758	184,807	188,831	193,220	197,417	201,616	205,901

continued

MAIN — Cmnwlth Ed. (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	28,008	26,960	21,650	21,780	16,850	15,880	16,110	16,920	17,700	18,060	18,880
NUCLEAR	25,513	30,290	41,130	45,090	53,690	56,390	57,200	56,860	56,960	57,910	58,140
HYDRO	12	0	0	0	0	0	0	0	0	0	0
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	3,839	4,170	2,980	2,080	1,000	830	970	1,560	2,100	2,390	2,850
OIL - CT	34	80	60	30	10	10	10	20	30	50	70
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	280	50	40	40	40	0	0	0	0	0	0
GAS - CT	214	250	180	90	40	30	40	70	110	140	220
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	57,900	61,800	66,040	69,110	71,630	73,140	74,330	75,430	76,900	78,550	80,160
IMPORT-EXPORT	6,478	3,700	2,060	1,690	570	510	770	1,170	1,250	1,150	1,140
NET FOR LOAD	64,378	65,500	68,100	70,800	72,200	73,650	75,100	76,600	78,150	79,700	81,300

MAIN — E. Missouri (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	23,812	25,890	26,395	23,732	24,166	24,564	24,066	24,641	24,753	25,262	25,669
NUCLEAR	0	0	220	5,010	5,751	5,958	6,173	6,238	6,671	6,670	6,638
HYDRO	926	926	926	926	926	926	926	926	926	926	926
PS LOAD (–)	32	103	160	169	118	120	105	82	111	114	124
PS OUTPUT (+)	9	54	85	89	61	64	55	44	58	60	65
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	96	24	21	140	154	140	149	147	150	144	143
OIL - CT	3	17	17	16	17	17	17	16	47	18	19
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	49	122	126	6	6	6	6	6	6	6	6
GAS - CT	1	1	1	1	1	1	1	1	1	1	1
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[1]	676	414	430	430	422	422	427	430	423	428	430
NET GENERATION	25,540	27,345	28,061	30,181	31,386	31,978	31,715	32,367	32,924	33,401	33,773
IMPORT-EXPORT	762	71	-49	-1,578	-2,089	-1,995	-1,035	-1,003	-876	-639	-281
NET FOR LOAD	26,302	27,416	28,012	28,603	29,297	29,983	30,680	31,364	32,048	32,762	33,492

MAIN — So. Cent. Ill. (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	31,034	33,598	31,528	30,965	31,808	32,503	33,168	32,982	34,792	35,713	35,599
NUCLEAR	0	0	2,997	5,113	5,391	5,442	5,434	6,318	5,411	5,434	6,361
HYDRO	8	10	10	10	10	10	10	10	10	10	10
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	13	177	108	79	128	116	127	133	175	226	287
OIL – CT	-6[g]	9	5	3	4	6	5	6	7	9	11
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	-4[h]	84	54	51	53	72	51	69	96	56	80
GAS – CT	11	64	39	27	34	33	34	35	44	39	53
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	31,056	33,942	34,741	36,248	37,428	38,182	38,829	39,553	40,535	41,487	42,401
IMPORT–EXPORT	-434	-1,644	-1,871	-2,196	-2,360	-1,370	-1,297	-999	-990	-937	-837
NET FOR LOAD	30,622	32,298	32,870	34,052	35,068	36,812	37,532	38,554	39,545	40,550	41,564

MAIN — WUM (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	22,912	26,559	28,403	26,568	29,394	30,589	31,806	32,762	33,587	34,290	34,712
NUCLEAR	10,132	8,746	9,235	11,326	11,301	11,022	10,802	10,737	10,788	10,757	10,824
HYDRO	1,521	1,314	1,323	1,334	1,334	1,334	1,335	1,335	1,334	1,341	1,341
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	91	103	122	7	8	16	25	34	33	41	57
OIL – CT	16	37	85	48	66	98	180	336	445	655	854
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	174	261	49	7	7	12	17	25	1	1	1
GAS – CT	34	47	54	10	10	15	17	23	30	38	52
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[i]	9	17	17	152	201	262	325	386	385	454	454
NET GENERATION	34,889	37,084	39,288	41,452	42,321	43,348	44,507	45,638	46,603	47,577	48,295
IMPORT–EXPORT	1,925	2,347	1,901	767	872	1,014	1,012	1,064	1,071	1,027	1,250
NET FOR LOAD	36,814	39,431	41,189	42,219	43,193	44,362	45,519	46,702	47,674	48,604	49,545

MAPP-U.S. (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	60,897	70,373	74,945	80,088	84,699	88,972	91,704	94,340	97,179	103,049	105,479
NUCLEAR	23,549	23,666	23,354	25,315	24,821	24,304	25,131	25,176	24,712	24,787	24,964
HYDRO	12,777	13,418	13,631	13,650	13,630	13,436	13,513	13,520	13,522	13,530	13,543
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	113	98	89	94	108	138	109	126	158	176	164
OIL – CT	13	32	41	71	96	156	139	223	354	289	247
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	241	157	64	57	110	118	103	126	159	81	58
GAS – CT	8	52	48	48	38	46	47	47	48	46	47
GAS – CC	4	0	0	0	0	0	0	0	0	1	4
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	97,602	107,796	112,172	119,323	123,502	127,170	130,746	133,558	136,132	141,959	144,506
IMPORT–EXPORT	-610	-5,140	-4,052	-5,574	-5,591	-5,270	-4,972	-3,899	-2,659	-4,793	-3,527
NET FOR LOAD	96,992	102,656	108,120	113,749	117,911	121,900	125,774	129,659	133,473	137,166	140,979

MAPP-Canada (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	6,826	7,330	8,570	9,220	9,385	9,805	10,335	10,835	11,405	11,830	12,085
NUCLEAR	0	0	0	0	0	0	0	0	0	0	0
HYDRO	22,184	24,101	22,941	23,104	23,792	23,812	23,831	23,509	23,312	23,679	25,199
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	21	35	20	20	20	20	20	30	45	40	40
OIL – CT	0	0	0	0	0	0	0	0	0	0	0
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	422	215	170	190	120	130	140	180	170	160	170
GAS – CT	61	55	45	30	20	20	20	20	50	75	50
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	29,514	31,736	31,746	32,564	33,337	33,787	34,346	34,574	34,982	35,784	37,544
IMPORT–EXPORT	-6,156	-7,804	-5,704	-4,939	-4,047	-3,497	-2,804	-1,995	-1,233	-1,055	-1,885
NET FOR LOAD	23,358	23,932	26,042	27,625	29,290	30,290	31,542	32,579	33,749	34,729	35,659

NPCC-U.S. (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	32,055	34,763	41,587	44,282	49,380	50,168	58,528	65,975	67,368	69,192	69,600
NUCLEAR	40,878	49,472	54,745	62,302	66,871	77,905	82,400	[illegible]	84,040	84,540	85,040
HYDRO	31,006	27,285	27,601	27,691	27,739	27,881	27,969	28,018	28,035	28,091	28,270
PS LOAD (–)	4,903	2,915	3,220	3,320	3,860	3,960	3,990	4,260	4,868	5,720	5,720
PS OUTPUT (+)	3,261	2,052	2,282	2,352	2,732	2,802	2,822	3,022	3,448	4,045	4,045
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	65,641	67,764	58,365	55,086	49,566	38,359	31,203	28,360	30,796	33,565	38,330
OIL – CT	225	281	108	112	116	300	347	235	153	128	127
OIL – CC	338	400	400	400	400	400	400	500	600	800	800
GAS – STEAM	15,386	8,133	7,122	924	883	760	0	0	0	0	0
GAS – CT	70	25	20	25	30	30	0	0	0	0	0
GAS – CC	221	0	0	0	0	0	0	0	0	0	0
OTHER	60	232	468	684	781	781	840	889	1,030	1,133	1,133
NET GENERATION	184,240	187,492	189,478	190,538	194,638	195,426	200,519	205,839	210,602	215,774	221,625
IMPORT-EXPORT	17,137	16,667	18,767	21,732	20,232	22,932	22,632	22,532	22,432	22,232	21,432
NET FOR LOAD	201,377	204,159	208,245	212,270	214,870	218,358	223,151	228,371	233,034	238,006	243,057

NPCC — New York (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	20,625	21,643	26,217	27,542	31,180	31,268	36,578	43,105	44,498	46,362	47,000
NUCLEAR	14,357	21,272	26,545	28,642	28,551	35,755	34,600	34,600	34,600	34,600	34,600
HYDRO	26,368	23,745	23,991	24,071	24,119	24,261	24,349	24,398	24,415	24,471	24,650
PS LOAD (–)	3,152	1,460	1,460	1,460	1,460	1,460	1,460	1,460	2,068	2,920	2,920
PS OUTPUT (+)	2,023	1,022	1,022	1,022	1,022	1,022	1,022	1,022	1,448	2,045	2,045
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	32,519	31,209	22,308	24,573	22,727	16,894	15,451	11,340	12,098	12,429	13,779
OIL – CT	150	206	33	42	46	250	297	185	103	78	77
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	14,097	8,133	7,122	924	883	760	0	0	0	0	0
GAS – CT	48	25	20	25	30	30	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	172	188	384	481	481	540	589	730	833	833
NET GENERATION	107,035	105,967	105,986	105,765	107,579	109,261	111,377	113,779	115,824	117,898	120,064
IMPORT-EXPORT	10,112	10,467	11,767	14,632	14,932	15,232	15,532	15,532	15,532	15,532	15,532
NET FOR LOAD	117,147	116,434	117,753	120,397	122,511	124,493	126,909	129,311	131,356	133,430	135,596

NPCC — New England (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	11,430	13,120	15,370	16,740	18,200	18,900	21,950	22,870	22,870	22,830	22,600
NUCLEAR	26,521	28,200	28,200	33,660	38,320	42,150	47,800	48,500	49,440	49,940	50,440
HYDRO	4,638	3,540	3,610	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620
PS LOAD (–)	1,751	1,455	1,760	1,860	2,400	2,500	2,530	2,800	2,800	2,800	2,800
PS OUTPUT (+)	1,238	1,030	1,260	1,330	1,710	1,780	1,800	2,000	2,000	2,000	2,000
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	33,122	36,555	36,057	30,513	26,839	21,465	15,752	17,020	18,698	21,136	24,551
OIL - CT	75	75	75	70	70	50	50	50	50	50	50
OIL - CC	338	400	400	400	400	400	400	500	600	800	800
GAS - STEAM	1,291	0	0	0	0	0	0	0	0	0	0
GAS - CT	22	0	0	0	0	0	0	0	0	0	0
GAS - CC	221	0	0	0	0	0	0	0	0	0	0
OTHER	60	60	280	300	300	300	300	300	300	300	300
NET GENERATION	77,205	81,525	83,492	84,773	87,059	86,165	89,142	92,060	94,778	97,876	101,561
IMPORT-EXPORT	7,025	6,200	7,000	7,100	5,300	7,700	7,100	7,000	6,900	6,700	5,900
NET FOR LOAD	84,230	87,725	90,492	91,873	92,359	93,865	96,242	99,060	101,678	104,576	107,461

NPCC-Canada (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	35,889	33,930	29,108	22,208	18,482	16,887	10,470	10,907	11,535	13,968	7,415
NUCLEAR	36,154	46,341	55,275	66,132	72,245	77,302	89,535	95,028	96,257	96,279	105,729
HYDRO	115,587	121,422	135,212	145,184	154,677	164,318	167,743	167,263	166,988	167,736	168,715
PS LOAD (–)	70	0	0	0	0	0	0	0	0	0	30
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	3,860	1,447	1,494	1,296	1,304	1,361	1,421	1,540	1,736	1,813	1,971
OIL - CT	14	18	18	27	24	25	0	7	39	83	166
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	276	372	522	746	603
NET GENERATION	191,434	203,158	221,107	234,847	246,732	259,893	269,445	275,117	277,077	280,625	284,569
IMPORT-EXPORT	14,896	9,902	2,144	-2,142	-5,139	-11,282	-13,688	-12,947	-8,280	-4,993	-1,507
NET FOR LOAD	206,330	213,060	223,251	232,705	241,593	248,611	255,757	262,170	268,797	275,632	283,062

continued

NPCC — New Brunswick (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	1,321	1,204	1,220	1,216	1,209	1,234	1,246	1,246	1,246	1,246	1,246
NUCLEAR	239	4,136	4,434	4,434	4,249	4,434	4,434	4,434	4,249	4,434	4,434
HYDRO	2,404	2,685	2,702	2,752	2,752	2,752	2,752	2,752	2,752	2,752	2,752
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	3,641	1,347	1,394	1,196	1,204	1,261	1,321	1,386	1,447	1,475	1,574
OIL - CT	0	0	0	0	0	0	0	0	0	0	0
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	7,605	9,372	9,750	9,598	9,414	9,681	9,753	9,818	9,694	9,907	10,006
IMPORT-EXPORT	410	-810	-249	361	961	994	1,186	1,382	1,767	1,817	1,979
NET FOR LOAD	8,015	8,562	9,501	9,959	10,375	10,675	10,939	11,200	11,461	11,724	11,985

NPCC — Ontario (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	34,568	32,726	27,888	20,992	17,273	15,653	9,224	9,661	10,289	12,722	6,169
NUCLEAR	35,914	40,002	48,831	59,694	65,992	70,695	81,996	86,689	88,103	87,940	97,390
HYDRO	34,597	35,159	35,165	35,030	35,030	35,030	35,010	34,915	34,915	34,924	34,914
PS LOAD (–)	70	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	167	0	0	0	0	0	0	0	0	0	0
OIL - CT	14	18	18	27	24	25	0	0	0	0	0
OIL - CC	0	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS - CT	0	0	0	0	0	0	0	0	0	0	0
GAS - CC	0	0	0	0	0	0	0	0	0	0	0
OTHER[k]	0	0	0	0	0	0	276	372	522	746	603
NET GENERATION	105,190	107,905	111,902	115,743	118,319	121,403	126,506	131,637	133,829	136,332	139,076
IMPORT-EXPORT	-4,354	-3,345	-3,174	-3,103	-3,089	-3,638	-5,939	-8,994	-8,999	-9,005	-8,847
NET FOR LOAD	100,836	104,560	108,728	112,640	115,230	117,765	120,567	122,643	124,830	127,327	130,229

continued

NPCC — Quebec (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	0	0	0	0	0	0	0	0	0	0	0
NUCLEAR	1	2,203	2,010	2,004	2,004	2,173	3,105	3,905	3,905	3,905	3,905
HYDRO	78,586	83,578	97,345	107,402	116,895	126,536	129,981	129,596	129,321	130,060	131,049
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	30
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	52	100	100	100	100	100	100	154	289	338	397
OIL – CT	0	0	0	0	0	0	0	7	39	83	166
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	78,639	85,881	99,455	109,506	118,999	128,809	133,186	133,662	133,554	134,386	135,487
IMPORT–EXPORT	18,840	14,057	5,567	600	-3,011	-8,638	-8,935	-5,335	-1,048	2,195	5,361
NET FOR LOAD	97,479	99,938	105,022	110,106	115,988	120,171	124,251	128,327	132,506	136,581	140,848

SERC (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	270,594	294,761	301,659	322,313	331,300	331,486	340,049	354,950	364,363	378,406	389,455
NUCLEAR	102,899	115,903	139,643	149,802	160,789	182,148	190,279	189,315	196,446	199,433	197,139
HYDRO	35,574	30,434	30,805	31,135	31,237	31,263	33,750	33,806	33,806	33,806	33,816
PS LOAD (–)	3,348	3,239	3,673	4,412	5,507	7,948	6,572	6,541	6,497	7,145	7,452
PS OUTPUT (+)	2,600	2,435	2,765	3,335	4,181	6,073	5,020	5,006	4,968	5,472	5,717
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	34,525	31,482	24,452	19,551	19,463	20,050	22,220	24,940	25,846	27,601	30,562
OIL – CT	372	690	647	1,871	1,530	975	641	872	1,217	1,510	1,942
OIL – CC	284	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	16,643	12,032	10,872	9,589	9,519	8,203	6,841	6,772	6,577	6,451	6,102
GAS – CT	656	1,608	1,823	1,729	1,782	2,013	990	870	748	854	607
GAS – CC	277	1,478	725	1,123	1,292	1,068	1,113	1,028	1,087	1,041	1,347
OTHER	4,345	2,290	2,689	3,271	4,299	4,522	3,643	4,531	4,639	5,070	4,979
NET GENERATION	465,411	489,874	512,407	539,307	559,885	579,853	597,974	615,549	633,200	652,499	664,214
IMPORT–EXPORT	1,421	2,633	-3,360	-8,812	-12,504	-11,458	-10,219	-8,899	-7,887	-8,529	-1,677
NET FOR LOAD	466,832	492,507	509,047	530,495	547,381	568,395	587,755	606,650	625,313	643,970	662,537

SERC — Florida (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	16,733	24,283	25,783	33,151	36,525	40,844	44,814	48,844	50,737	53,223	56,404
NUCLEAR	19,194	19,758	26,481	25,162	23,065	26,437	25,344	24,381	25,341	25,220	24,453
HYDRO	203	227	227	243	254	254	254	254	254	254	254
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	32,687	28,457	22,580	15,933	17,143	17,321	19,816	20,132	21,044	22,527	24,002
OIL – CT	266	302	309	242	267	285	310	305	312	319	392
OIL – CC	284	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	16,031	11,317	10,179	8,410	8,310	7,231	6,314	6,279	6,215	6,169	5,843
GAS – CT	375	1,361	1,541	1,450	1,461	1,704	881	753	649	592	545
GAS – CC	277	1,478	725	1,123	1,292	1,068	1,113	1,028	1,087	1,041	1,347
OTHER	3,105	1,375	1,642	2,013	2,230	2,441	2,564	3,443	3,571	3,765	3,888
NET GENERATION	89,155	88,558	89,467	87,727	90,547	97,585	101,410	105,419	109,210	113,110	117,128
IMPORT–EXPORT	5,839	12,079	13,456	19,349	20,244	16,913	16,966	16,763	16,944	17,268	17,589
NET FOR LOAD	94,994	100,637	102,923	107,076	110,791	114,498	118,376	122,182	126,154	130,378	134,717

SERC — Southern (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	91,528	98,553	105,750	117,662	123,710	119,028	120,708	121,683	125,234	130,278	128,977
NUCLEAR	17,117	18,427	20,430	19,337	20,407	27,045	28,651	31,368	32,285	31,430	32,292
HYDRO	9,499	6,966	7,206	7,444	7,535	7,535	10,027	10,083	10,083	10,083	10,093
PS LOAD (–)	327	669	669	669	669	2,368	977	463	745	1,069	723
PS OUTPUT (+)	246	503	503	503	503	1,810	745	354	568	812	551
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	59	70	109	541	457	211	50	50	63	68	30
OIL – CT	19	71	152	1,231	1,004	422	47	18	39	78	57
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	393	440	501	877	944	732	442	412	280	222	198
GAS – CT	255	238	241	247	238	240	6	6	6	6	6
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	326	195	301	473	1,095	810	0	0	0	0	0
NET GENERATION	119,115	124,794	134,524	147,646	155,224	155,465	159,699	163,511	167,813	171,908	171,481
IMPORT–EXPORT	-10,568	-11,470	-16,646	-26,015	-30,025	-26,604	-26,748	-25,729	-26,020	-25,992	-21,525
NET FOR LOAD	108,547	113,324	117,878	121,631	125,199	128,861	132,951	137,782	141,793	145,916	149,956

SERC — TVA (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	65,410	74,764	70,200	70,230	68,797	70,445	71,695	75,054	78,473	81,737	84,668
NUCLEAR	26,816	24,795	31,602	36,640	42,659	48,517	52,109	52,963	53,887	54,281	54,613
HYDRO	19,915	17,732	17,732	17,732	17,732	17,732	17,732	17,732	17,732	17,732	17,732
PS LOAD (–)	1,603	1,301	1,499	1,367	1,359	1,242	1,318	1,249	1,361	1,463	1,753
PS OUTPUT (+)	1,255	1,007	1,161	1,059	1,046	962	1,021	968	1,054	1,133	1,358
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	34	119	48	47	49	79	102	160	254	385	579
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	0	0	0	0	0	0	0	0	0	0	0
GAS – CT	0	0	0	0	0	0	0	0	0	0	0
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	477	0	0	0	0	0	0	0	0	0	0
NET GENERATION	112,304	117,116	119,244	124,341	128,924	136,493	141,341	145,628	150,039	153,805	157,197
IMPORT–EXPORT	-2,268	-143	359	267	280	334	691	343	384	418	830
NET FOR LOAD	110,036	116,973	119,603	124,608	129,204	136,827	142,032	145,971	150,423	154,223	158,027

SERC — VACAR (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	96,913	97,161	99,926	101,270	102,268	101,169	102,832	109,369	109,919	113,168	119,406
NUCLEAR	39,772	52,923	61,130	68,663	74,658	80,149	84,175	80,603	84,933	88,502	85,781
HYDRO	5,957	5,509	5,640	5,716	5,716	5,742	5,737	5,737	5,737	5,737	5,737
PS LOAD (–)	1,418	1,269	1,505	2,376	3,479	4,338	4,277	4,829	4,391	4,613	4,976
PS OUTPUT (+)	1,099	925	1,101	1,773	2,632	3,301	3,254	3,684	3,346	3,527	3,808
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	1,779	2,955	1,763	3,077	1,863	2,518	2,354	4,758	4,739	5,006	6,530
OIL – CT	53	198	138	351	210	189	182	389	612	728	914
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	219	275	192	302	265	240	85	81	82	60	61
GAS – CT	26	9	41	32	83	69	103	111	93	256	56
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	437	720	746	785	974	1,271	1,079	1,088	1,068	1,305	1,091
NET GENERATION	144,837	159,406	169,172	179,593	185,190	190,310	195,524	200,991	206,138	213,676	218,408
IMPORT–EXPORT	8,418	2,167	-529	-2,413	-3,003	-2,101	-1,128	-276	805	-223	1,429
NET FOR LOAD	153,255	161,573	168,643	177,180	182,187	188,209	194,396	200,715	206,943	213,453	219,837

SPP (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	90,508	103,473	108,653	115,437	120,860	124,685	129,405	133,042	141,318	143,736	151,125
NUCLEAR	7,463	11,815	21,304	24,369	31,529	33,490	37,103	39,333	40,576	41,872	41,385
HYDRO	5,642	5,580	5,579	5,642	5,650	5,650	5,649	5,650	5,650	5,650	5,650
PS LOAD (-)	149	107	117	123	0	0	0	0	0	0	0
PS OUTPUT (+)	75	67	73	77	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	1,328	2,655	1,798	1,701	2,399	3,266	3,563	2,684	2,719	2,748	2,758
OIL - CT	22	54	66	139	252	197	321	577	704	1,823	2,039
OIL - CC	5	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	95,162	93,382	90,864	79,589	78,719	79,156	78,885	79,657	77,721	79,248	81,113
GAS - CT	148	224	244	226	284	254	265	290	297	360	385
GAS - CC	3,961	3,128	3,384	3,435	2,814	3,059	3,233	3,238	3,451	3,542	3,653
OTHER	896	896	889	889	889	1,947	1,947	2,958	2,998	3,750	5,054
NET GENERATION	205,061	221,167	232,737	231,381	243,396	251,704	260,371	267,429	275,434	282,729	293,162
IMPORT-EXPORT	6,534	-2,429	-2,247	6,988	3,533	3,178	2,329	3,350	3,317	3,917	1,956
NET FOR LOAD	211,595	218,738	230,490	238,369	246,929	254,882	262,700	270,779	278,751	286,646	295,118

SPP — W. Ark. – La. – Miss. Area (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	17,135	20,280	22,071	26,446	27,638	29,167	29,136	29,635	33,782	35,219	38,265
NUCLEAR	7,463	11,815	21,304	20,669	25,913	27,521	30,789	32,907	34,149	35,376	34,865
HYDRO	176	167	166	167	167	167	166	167	167	167	167
PS LOAD (-)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL - STEAM	1,083	2,558	1,660	1,502	2,193	3,041	3,340	2,440	2,483	2,508	2,516
OIL - CT	3	8	3	3	5	10	12	18	15	39	40
OIL - CC	5	0	0	0	0	0	0	0	0	0	0
GAS - STEAM	55,444	56,175	52,459	43,198	42,369	43,234	43,162	45,707	43,607	44,114	46,180
GAS - CT	24	50	71	48	72	53	46	48	52	67	87
GAS - CC	1,416	444	516	668	322	351	368	379	365	338	420
OTHER	649	653	653	653	653	653	653	653	653	653	653
NET GENERATION	83,398	92,150	98,903	93,354	99,332	104,197	107,672	111,954	115,273	118,481	123,193
IMPORT-EXPORT	18,588	10,724	9,918	19,273	17,152	15,218	14,925	14,045	13,604	13,502	12,268
NET FOR LOAD	101,986	102,874	108,821	112,627	116,484	119,415	122,597	125,999	128,877	131,983	135,461

SPP — Okla. Area (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	33,103	37,177	39,829	43,491	47,887	,8,244	51,163	52,878	55,909	55,728	58,274
NUCLEAR	0	0	0	0	0	0	0	0	0	0	0
HYDRO	5,403	5,353	5,353	5,415	5,423	5,423	5,423	5,423	5,423	5,423	5,423
PS LOAD (–)	149	107	117	123	0	0	0	0	0	0	0
PS OUTPUT (+)	75	67	73	77	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	86	29	65	66	71	69	69	69	69	69	69
OIL – CT	0	0	0	0	0	0	0	313	387	1,408	1,536
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	35,127	33,705	35,281	33,782	33,874	33,322	33,462	31,575	31,535	32,279	32,022
GAS – CT	55	29	30	29	30	27	27	48	27	67	65
GAS – CC	2,539	2,678	2,859	2,753	2,474	2,683	2,835	2,828	3,058	3,176	3,214
OTHER	247	243	236	236	236	1,294	1,294	2,305	2,345	3,097	4,401
NET GENERATION	76,486	79,174	83,609	85,726	89,995	91,062	94,273	95,439	98,753	101,247	105,004
IMPORT–EXPORT	-10,946	-9,168	-9,127	-8,898	-10,268	-8,569	-8,772	-6,937	-6,880	-6,164	-6,302
NET FOR LOAD	65,540	70,006	74,482	76,828	79,727	82,493	85,501	88,502	91,873	95,083	98,702

SPP — W. Mo. – Kan. Area (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	40,270	46,016	46,753	45,500	45,335	47,274	49,106	50,529	51,627	52,789	54,586
NUCLEAR	0	0	0	3,700	5,616	5,969	6,314	6,426	6,427	6,496	6,520
HYDRO	63	60	60	60	60	60	60	60	60	60	60
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	159	68	73	133	135	156	154	175	167	171	173
OIL – CT	19	46	63	136	247	187	309	246	302	376	463
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	4,591	3,502	3,124	2,609	2,476	2,600	2,261	2,375	2,579	2,855	2,911
GAS – CT	69	145	143	149	182	174	192	194	218	226	233
GAS – CC	6	6	9	14	18	25	30	31	28	28	19
OTHER	0	0	0	0	0	0	0	0	0	0	0
NET GENERATION	45,177	49,843	50,225	52,301	54,069	56,445	58,426	60,036	61,408	63,001	64,965
IMPORT–EXPORT	-1,108	-3,985	-3,038	-3,387	-3,351	-3,471	-3,824	-3,758	-3,407	-3,421	-4,010
NET FOR LOAD	44,069	45,858	47,187	48,914	50,718	52,974	54,602	56,278	58,001	59,580	60,955

WSCC-U.S. (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	129,949	138,418	149,981	154,393	161,333	173,700	183,083	190,201	199,571	206,996	215,005
NUCLEAR	12,836	30,087	58,452	61,919	69,488	80,606	81,970	82,496	82,413	91,648	91,989
HYDRO	216,553[1]	161,991	161,153	164,409	164,758	162,036	165,872	166,192	166,796	164,135	170,457
PS LOAD (–)	2,055	1,249	1,388	1,572	1,704	2,153	2,414	2,392	2,175	2,244	2,410
PS OUTPUT (+)	1,707	1,196	1,324	1,399	1,561	2,021	2,352	2,336	2,185	2,233	2,349
GEOTHERMAL	4,844	8,793	9,576	11,037	12,618	13,349	14,450	16,949	17,814	18,457	18,677
OIL – STEAM	9,487	15,818	15,346	16,457	18,747	19,599	19,429	18,808	21,067	18,806	20,793
OIL – CT	112	235	281	346	361	387	619	884	578	570	461
OIL – CC	22	161	201	336	278	375	334	288	317	316	372
GAS – STEAM	54,017	79,521	62,879	60,060	55,396	51,813	50,951	50,378	47,364	49,385	44,332
GAS – CT	370	689	929	896	1,337	1,866	1,967	1,966	1,762	1,747	1,689
GAS – CC	3,006	4,866	4,843	4,938	4,910	4,619	4,675	5,175	5,221	5,162	5,101
OTHER	1,643	5,984	7,814	10,744	12,381	15,024	15,825	17,605	19,729	21,276	23,299
NET GENERATION	432,491	446,510	471,391	485,362	501,464	523,242	539,113	550,886	562,642	578,487	592,114
IMPORT–EXPORT	2,819	7,615	6,138	11,748	13,541	12,923	15,148	17,731	17,057	18,166	21,750
NET FOR LOAD	435,310	454,125	477,529	497,110	515,005	536,165	554,261	568,617	579,699	596,653	613,864

WSCC — NWPP (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	42,577	46,520	56,015	60,329	63,543	68,869	71,924	72,548	74,210	75,602	78,111
NUCLEAR	8,479	10,840	17,659	16,250	18,580	25,106	26,080	25,570	25,570	34,751	34,934
HYDRO	152,250[1]	121,390	119,729	122,865	123,005	119,805	123,072	123,083	123,455	120,406	126,437
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	99	137	137	137	137	137	137	137	138
OIL – STEAM	110	0	0	0	0	0	0	105	105	105	105
OIL – CT	0	0	0	0	0	0	0	219	219	219	0
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	640	32	341	350	350	350	384	827	1,038	1,113	1,149
GAS – CT	10	0	64	65	65	65	193	193	193	193	193
GAS – CC	2	74	482	480	480	480	480	937	937	937	906
OTHER	270	401	635	836	931	1,015	1,149	1,602	1,740	1,871	1,876
NET GENERATION	204,338	179,257	195,024	201,312	207,091	215,827	223,419	225,221	227,604	235,334	243,849
IMPORT–EXPORT	-31,017	-310	-1,215	-191	921	680	-9	236	668	879	869
NET FOR LOAD	173,321	178,947	193,809	201,121	208,012	216,507	223,410	225,457	228,272	236,213	244,718

WSCC — RMPA (Million kWh) Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	23,415	25,201	27,005	28,374	29,931	31,517	33,189	34,992	37,021	38,747	40,543
NUCLEAR	505	975	1,030	994	1,272	1,445	1,449	1,445	1,445	1,445	1,445
HYDRO	9,912	9,137	9,125	9,167	9,195	9,220	9,226	9,208	9,190	9,171	9,152
PS LOAD (–)	232	486	599	672	673	678	698	703	703	703	703
PS OUTPUT (+)	144	262	340	378	378	381	391	394	394	394	394
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	38	95	95	105	107	113	112	120	127	134	142
OIL – CT	6	19	14	38	43	43	40	29	34	35	15
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	447	700	640	668	676	698	703	733	773	741	854
GAS – CT	54	172	109	331	382	376	352	254	294	250	110
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	4	36	36	36	36	36	36	36	36	104	105
NET GENERATION	34,293	36,111	37,795	39,419	41,347	43,151	44,800	46,508	48,611	50,318	52,057
IMPORT–EXPORT	-3,013	-2,728	-2,712	-2,599	-2,528	-2,448	-2,375	-2,299	-2,642	-2,614	-2,543
NET FOR LOAD	31,280	33,383	35,083	36,820	38,819	40,703	42,425	44,209	45,969	47,704	49,514

WSCC — AZ-NM (Million kWh) Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	39,218	41,448	40,726	41,870	42,540	45,302	48,187	49,905	51,121	53,602	57,129
NUCLEAR	0	0	4,764	9,857	12,825	15,641	16,231	16,964	16,984	16,944	17,091
HYDRO	2,364	2,536	2,469	2,459	2,478	2,499	2,521	2,537	2,557	2,571	2,590
PS LOAD (–)	280	263	242	206	205	214	218	213	196	189	320
PS OUTPUT (+)	196	184	169	144	144	150	153	149	137	132	224
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	346	657	848	813	912	927	941	1,147	1,144	890	733
OIL – CT	1	17	13	108	95	106	99	96	85	76	104
OIL – CC	13	150	188	323	265	363	322	277	308	307	362
GAS – STEAM	4,541	5,168	3,852	2,689	2,740	1,964	2,085	1,891	1,985	2,396	2,105
GAS – CT	190	116	205	76	267	515	522	503	566	502	410
GAS – CC	1,029	1,710	1,125	833	786	525	601	667	754	701	652
OTHER	123	1,328	1,984	3,021	2,949	2,703	2,096	2,480	3,190	2,778	2,446
NET GENERATION	47,741	53,051	56,101	61,987	65,796	70,481	73,540	76,403	78,635	80,710	83,526
IMPORT–EXPORT	-5,024	-4,426	-4,011	-4,409	-4,416	-4,511	-3,974	-1,482	-1,698	-1,466	-1,872
NET FOR LOAD	42,717	48,625	52,090	57,578	61,380	65,970	69,566	74,921	76,937	79,244	81,654

WSCC — CA-SNV (Million kWh)

Subregional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	24,739	25,249	26,235	23,820	25,319	28,012	29,783	32,756	37,219	39,045	39,222
NUCLEAR	3,852	18,272	34,999	34,818	36,811	38,414	38,210	38,517	38,414	38,508	38,519
HYDRO	52,027[l]	28,928	29,830	29,918	30,080	30,512	31,053	31,364	31,594	31,987	32,278
PS LOAD (–)[m]	1,543	500	547	694	826	1,261	1,498	1,476	1,276	1,352	1,387
PS OUTPUT (+)[m]	1,367	750	815	877	1,039	1,490	1,808	1,793	1,654	1,707	1,731
GEOTHERMAL	4,844	8,793	9,477	10,900	12,481	13,212	14,313	16,812	17,677	18,320	18,539
OIL – STEAM	8,993	15,066	14,403	15,539	17,728	18,559	18,376	17,436	19,691	17,677	19,813
OIL – CT	105	199	254	200	223	238	480	540	240	240	342
OIL – CC	9	11	13	13	13	12	12	11	9	9	10
GAS – STEAM	48,389	73,621	58,046	56,353	51,630	48,801	47,779	46,927	43,568	45,135	40,224
GAS – CT	116	401	551	424	623	910	900	1,016	709	802	976
GAS – CC	1,975	3,082	3,236	3,625	3,644	3,614	3,594	3,571	3,530	3,524	3,543
OTHER	1,246	4,219	5,159	6,851	8,465	11,276	12,544	13,487	14,763	16,523	18,872
NET GENERATION	146,119	178,091	182,471	182,644	187,230	193,783	197,354	202,754	207,792	212,125	212,682
IMPORT–EXPORT	41,873	15,079	14,076	18,947	19,564	19,202	21,506	21,276	20,729	21,367	25,296
NET FOR LOAD	187,992	193,170	195,547	201,591	206,794	212,985	218,860	224,030	228,521	233,492	237,978

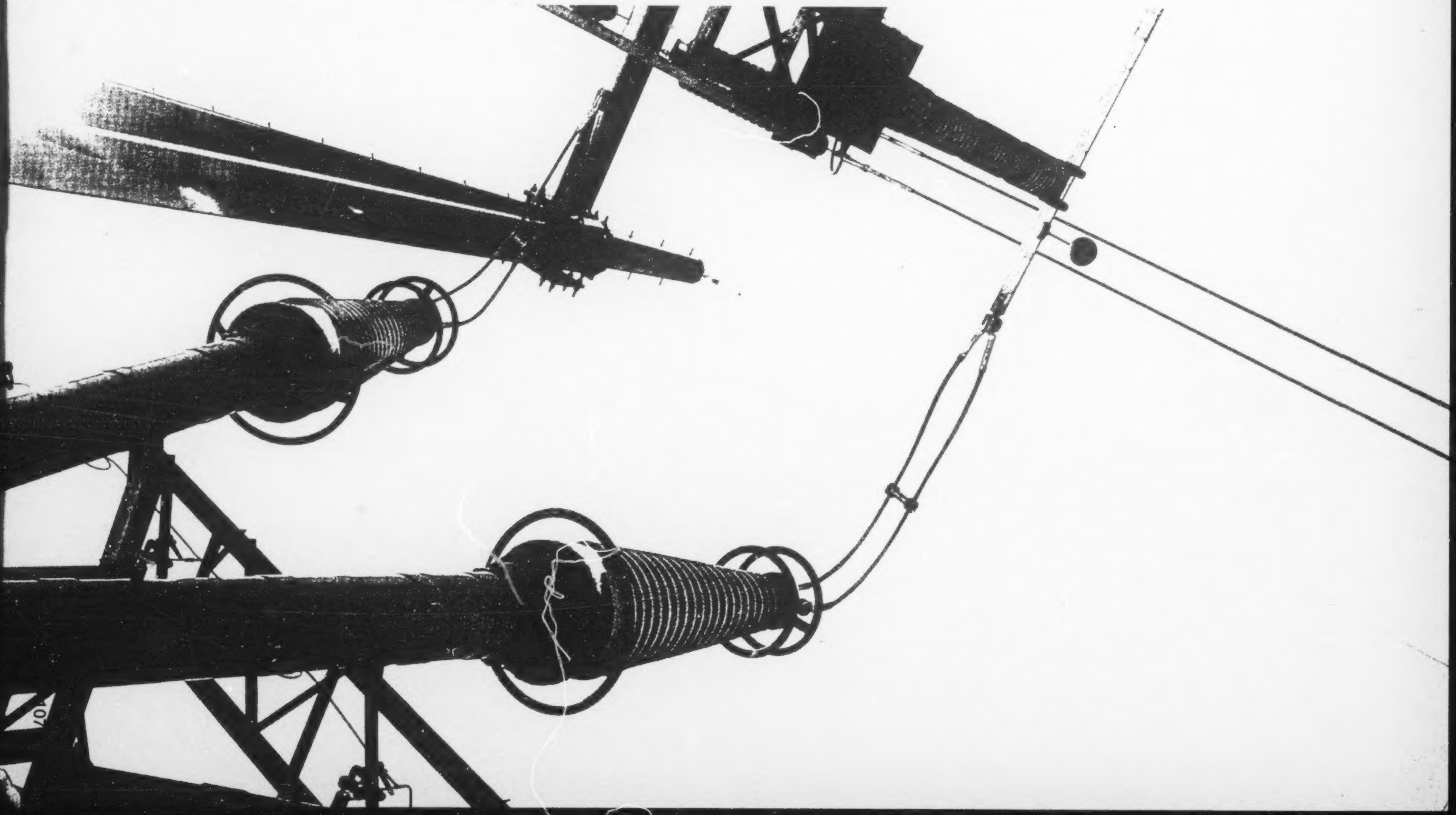
WSCC-Canada (Million kWh)

Regional Table 16

	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
COAL	19,441	23,279	25,952	27,968	30,781	33,618	35,365	37,302	39,130	41,042	42,140
NUCLEAR	0	0	0	0	0	0	0	0	0	0	0
HYDRO	41,283	39,045	42,096	43,801	46,041	48,080	49,779	47,842	49,489	51,871	54,628
PS LOAD (–)	0	0	0	0	0	0	0	0	0	0	0
PS OUTPUT (+)	0	0	0	0	0	0	0	0	0	0	0
GEOTHERMAL	0	0	0	0	0	0	0	0	0	0	0
OIL – STEAM	0	0	0	0	0	0	0	0	0	0	0
OIL – CT	0	0	0	0	0	0	0	0	0	0	0
OIL – CC	0	0	0	0	0	0	0	0	0	0	0
GAS – STEAM	2,978	2,400	2,559	2,913	2,926	2,403	2,425	5,794	5,738	5,675	5,647
GAS – CT	685	817	893	874	873	813	817	815	803	798	800
GAS – CC	0	0	0	0	0	0	0	0	0	0	0
OTHER	1,156	1,200	0	106	107	27	28	23	20	26	39
NET GENERATION	65,543	66,741	71,500	75,662	80,728	84,941	88,414	91,776	95,180	99,412	103,254
IMPORT–EXPORT	-4,052	-351	0	0	0	0	0	0	0	0	0
NET FOR LOAD	61,491	66,390	71,500	75,662	80,728	84,941	88,414	91,776	95,180	99,412	103,254

FOOTNOTES TO TABLE 16

a/ Includes refuse.
b/ Includes Beth Steel & Del City 1,2, & 3.
c/ Includes BC & PS Trashburner Units.
d/ Del City 1, 2, & 3 drop out.
e/ Difference between adverse hydro and median hydro, and small, cogeneration, and wood-fired steam units.
f/ Difference between adverse hydro and median hydro.
g/ In 1982, auxiliary power requirement of oil-fired combustion turbines exceeded gross electrical output.
h/ In 1982, auxiliary power requirement of gas-fired steam units exceeded gross electrical output.
i/ Small, cogeneration, and wood-fired steam units.
j/ Although Québec exports electric energy to the U.S., it imports much more energy from Churchill Falls in Labrador, becoming a net *importer* of electric energy. Because Churchill Falls is not a NERC member, this results in NERC-Canada being a net importer in certain years, while Canada as a whole is consistently a net exporter of electric energy to the U.S.
l/ Adverse hydro is assumed for forecast years. Data for actual year can be greater than for forecast years if median hydro occurred.
m/ Pumped storage output is greater than input due to a pumped storage facility being in combination with a California reservoir which cannot be disaggregated.



Estimated Fossil Fuel Requirements

The *Estimated Fossil Fuel Requirements* data provides a tabulation of fuel burned for 1982 and that expected to be burned for the 1983-1992 period for electric energy generation by coal, oil, and natural gas.

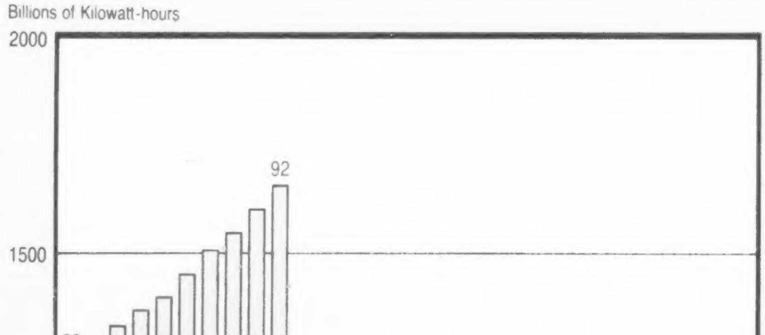
The changes in the fossil fuel requirements projected over the next ten years in the U.S. are as follows: total *Coal* expanding by 35.6% from 635,665,000 tons in 1983 to 862,235,000 tons in 1992; total *Oil* decreasing by 13.4% from 245,519,000 barrels in 1983 to 212,607,000 barrels in 1992; and *Natural Gas* dropping by 22.3% from 3,173,506,000 MCF in 1983 to 2,464,388,000 MCF in 1992.

While the energy generated from gas is expected to decline slowly but steadily over the next ten years, the data indicate that generation from oil use reaches a minimum in 1989 and then begins to climb again through 1992.

In Canada, coal use increases by 22.4% from 36,333,000 tons in 1983 to 44,476,000 tons in 1992, while oil and gas account for very little generation.

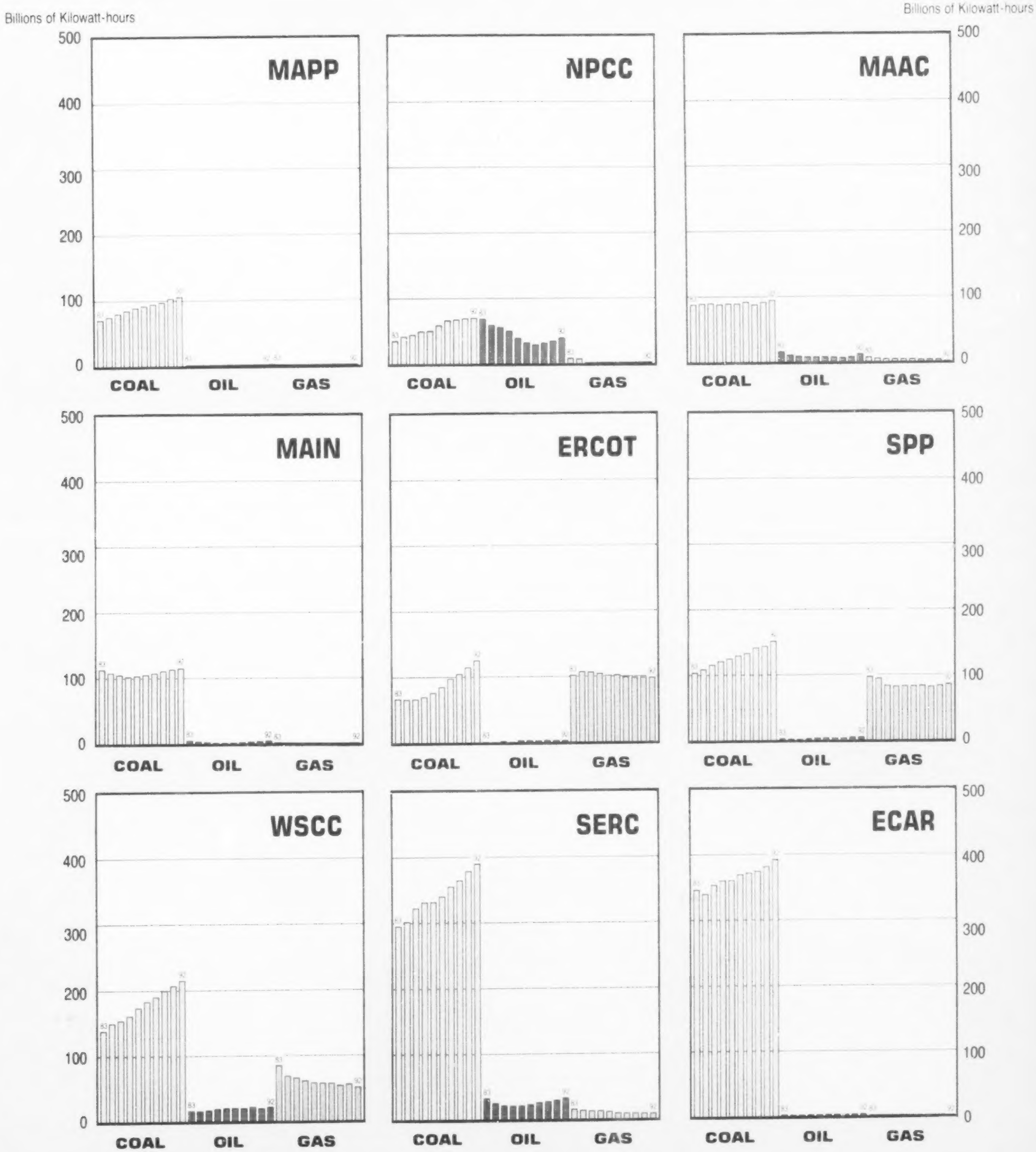
NERC Generation by Fossil Fuel Type

(U.S.)



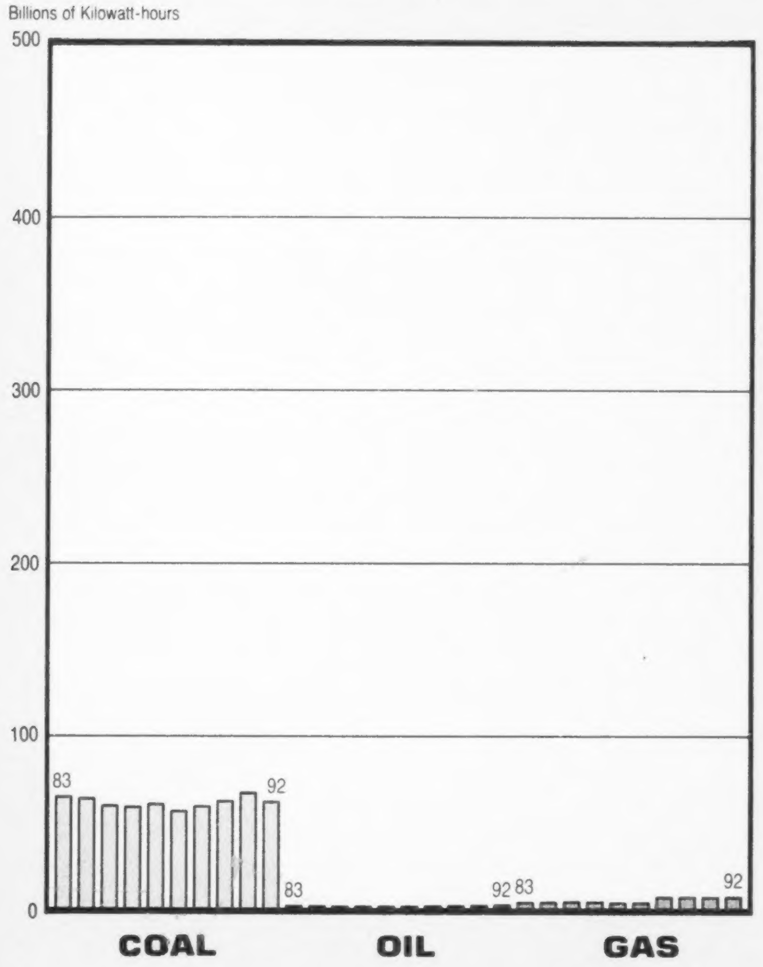
NERC Regional Generation by Fossil Fuel Type

(U.S.)

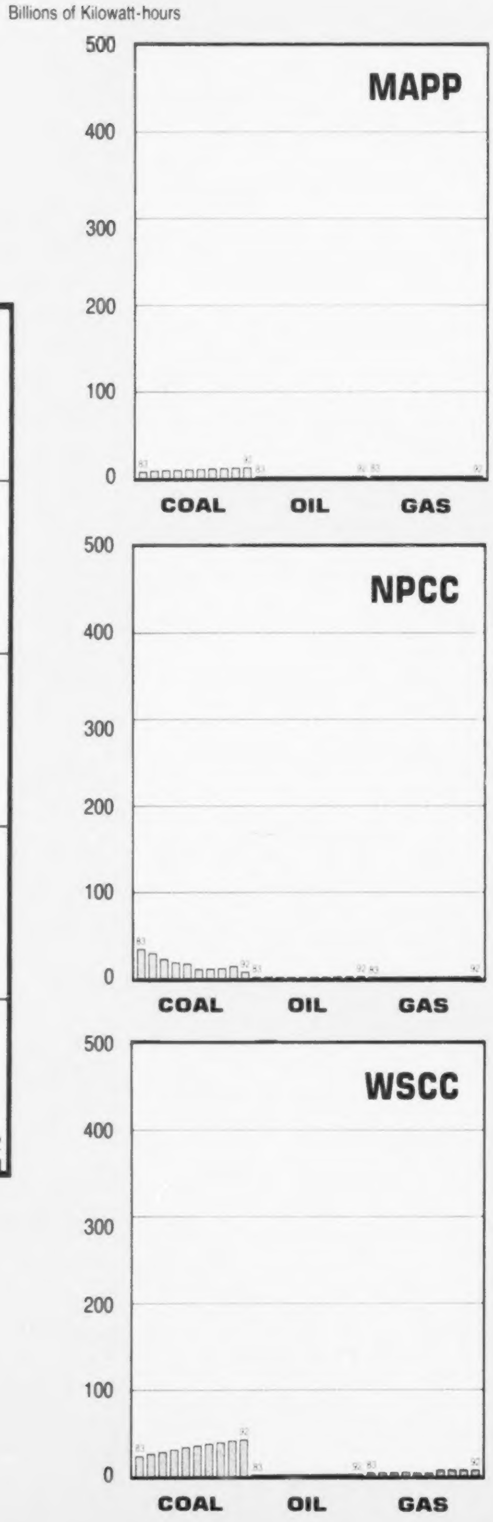


NERC Generation by Fossil Fuel Type

(Canada)



Regional Generation by Fossil Fuel Type
(Canada)



Total Coal (1000 Tons)

Regional Table 17

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	154,366	162,540	159,581	166,059	169,277	169,354	173,502	174,623	175,823	179,111	184,061
ERCOT	45,619	49,148	48,746	49,190	52,059	57,325	65,130	78,179	84,671	92,273	99,600
MAAC	35,411	36,486	36,916	37,243	36,570	36,796	36,781	37,755	36,173	37,950	39,090
MAIN	54,671	58,241	55,512	54,256	52,518	54,276	57,285	58,687	60,872	62,693	64,082
MAPP – U.S.	45,979	50,479	53,619	56,511	60,094	62,602	64,170	65,640	67,442	72,044	74,119
NPCC – U.S.	13,008	14,438	16,550	17,612	19,844	20,054	23,831	26,929	27,449	28,204	28,314
SERC	113,221	123,688	125,977	135,365	138,159	138,776	140,397	145,892	151,105	156,395	160,795
SPP	54,511	64,194	67,335	72,202	75,938	78,965	81,941	84,529	89,670	91,884	96,946
WSCC – U.S.	71,616	76,451	83,354	86,074	89,446	95,237	99,382	102,122	106,654	110,734	115,228
NERC – U.S.	588,402	635,665	647,590	674,512	693,905	713,385	742,419	774,356	799,859	831,288	862,235
MAPP – CANADA	6,707	7,357	8,345	9,195	9,355	9,780	10,270	10,770	11,368	11,785	12,140
NPCC – CANADA	13,397	12,681	10,896	8,340	6,959	6,370	3,968	4,128	4,359	5,249	2,838
WSCC – CANADA	14,503	16,295	18,168	19,578	21,547	23,533	24,756	26,111	27,391	28,729	29,498
NERC – CANADA	34,607	36,333	37,409	37,113	37,861	39,683	38,994	41,009	43,118	45,763	44,476

Total Coal (1000 Tons)

Subregional Table 17

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	15,550	15,376	12,430	12,510	9,749	9,210	9,338	9,778	10,242	10,438	10,896
EAST MISSOURI	11,469	12,022	12,548	11,064	11,216	11,349	11,168	11,395	11,435	11,635	11,824
SO. CENT. ILL.	15,077	16,027	15,040	14,635	15,031	16,589	18,879	18,949	19,889	20,510	20,572
WUM	12,575	14,816	15,494	16,047	16,522	17,128	17,900	18,565	19,306	20,110	20,790
MAIN	54,671	58,241	55,512	54,256	52,518	54,276	57,285	58,687	60,872	62,693	64,082
NEW YORK	8,820	9,321	10,556	11,083	12,746	12,683	15,270	18,010	18,530	19,300	19,500
NEW ENGLAND	4,188	5,117	5,994	6,529	7,098	7,371	8,561	8,919	8,919	8,904	8,814
NPCC – U.S.	13,008	14,438	16,550	17,612	19,844	20,054	23,831	26,929	27,449	28,204	28,314
NEW BRUNSWICK	604	560	567	565	562	573	578	578	579	579	578
ONTARIO	12,793	12,121	10,329	7,775	6,397	5,797	3,390	3,550	3,780	4,670	2,260
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	13,397	12,681	10,896	8,340	6,959	6,370	3,968	4,128	4,359	5,249	2,838
FLORIDA	7,194	10,060	10,746	13,848	15,276	16,985	18,605	20,271	21,083	22,156	23,551
SOUTHERN	39,621	41,404	44,539	50,500	52,106	50,670	49,602	49,334	52,047	53,339	52,798
TVA	27,526	32,646	30,068	30,003	29,232	29,937	30,506	31,992	33,541	34,984	36 227
VACAR	38,880	39,578	40,624	41,014	41,545	41,184	41,684	44,295	44,434	45,916	48,219
SERC	113,221	123,688	125,977	135,365	138,159	138,776	140,397	145,892	151,105	156,395	160,795
GROUP A	11,131	14,563	15,660	18,394	19,162	20,194	20,281	20,550	23,262	24,239	26,087
GROUP B	20,373	23,039	24,535	27,484	30,559	31,411	33,270	34,787	36,653	37,302	39,577
GROUP C	23,007	26,592	27,140	26,324	26,217	27,360	28,390	29,192	29,755	30,343	31,282
SPP	54,511	64,194	67,335	72,202	75,938	78,965	81,941	84,529	89,670	91,884	96,946
NWPP – U.S.	25,571	26,807	32,489	34,991	36,337	38,399	39,146	38,415	38,859	39,666	41,110
RMPA	12,601	15,120	16,204	17,024	17,959	18,910	19,913	20,995	22,213	23,248	24,326
AZ-NM	21,110	21,896	21,541	22,149	22,490	23,922	25,431	26,334	26,972	28,297	30,181
CA-SNV	12,334	12,628	13,120	11,910	12,660	14,006	14,892	16,378	18,610	19,523	19,611
WSCC – U.S.	71,616	76,451	83,354	86,074	89,446	95,237	99,382	102,122	106,654	110,734	115,228

continued

Western[a] Lignite (1000 Tons)

Regional Table 17

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR[b]	—	—	—	—	—	—	—	—	—	—	—
ERCOT	29,793	31,915	32,028	32,038	34,698	38,915	46,337	59,969	66,264	73,263	77,054
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	16,305	18,313	19,923	21,251	23,047	23,893	24,474	24,708	25,347	27,239	27,764
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	1,991	4,469	5,007	5,976	7,036	7,471	8,933	8,933
WSCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NERC – U.S.	46,098	50,228	51,951	55,280	62,214	67,815	76,787	91,713	99,082	109,435	113,751
MAPP – CANADA	6,663	7,300	8,290	9,140	9,300	9,725	10,215	10,715	11,340	11,785	12,140
NPCC – CANADA	593	593	593	593	593	593	550	550	440	330	330
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	7,256	7,893	8,883	9,733	9,893	10,318	10,765	11,265	11,780	12,115	12,470

Western[a] Lignite (1000 Tons)

Subregional Table 17

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	593	593	593	593	593	593	550	550	440	330	330
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	593	593	593	593	593	593	550	550	440	330	330
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	0	0	0	0	953	1,230	2,199	3,259	3,663	4,205	4,205
GROUP B	0	0	0	1,991	3,516	3,777	3,777	3,777	3,808	4,728	4,728
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	1,991	4,469	5,007	5,976	7,036	7,471	8,933	8,933
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	0	0	0	0	0	0	0	0	0	0	0

Western[a] **Coal** (1000 Tons)

Regional Table 17

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR[b]	—	—	—	—	—	—	—	—	—	—	—
ERCOT	15,826	17,233	16,718	17,152	17,361	18,410	18,793	18,210	18,407	19,010	22,428
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	21,395	22,656	20,595	21,135	19,040	18,760	18,828	19,533	20,331	20,698	21,181
MAPP – U.S.	26,935	28,981	30,252	31,600	33,276	34,809	35,860	36,994	37,992	40,716	42,191
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	1,770	1,610	1,630	1,630	1,620	1,570	1,600	1,600	1,600	1,600	1,600
SPP	49,783	58,209	61,846	64,632	65,821	67,509	68,789	69,564	74,072	74,442	78,221
WSCC – U.S.	71,616	76,451	83,354	86,074	89,446	95,237	99,382	102,122	106,654	110,734	115,228
NERC – U.S.	187,325	205,140	214,395	222,223	226,564	236,295	243,252	248,023	259,056	267,200	280,849
MAPP – CANADA	44	57	55	55	55	55	55	55	28	0	0
NPCC – CANADA	2,070	2,070	2,070	1,973	1,798	1,783	980	1,040	1,380	1,790	990
WSCC – CANADA	14,503	16,295	18,168	19,578	21,547	23,533	24,756	26,111	27,391	28,729	29,498
NERC – CANADA	16,617	18,422	20,293	21,606	23,400	25,371	25,791	27,206	28,799	30,519	30,488

Western[a] **Coal** (1000 Tons)

Subregional Table 17

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	12,564	12,554	10,217	9,955	7,506	7,049	7,124	7,498	8,048	8,094	8,604
EAST MISSOURI	865	708	817	788	738	738	288	288	338	438	338
SO. CENT. ILL.	2,007	1,622	1,431	1,210	1,320	1,374	1,396	1,425	1,476	1,495	1,470
WUM	5,959	7,772	8,130	9,182	9,476	9,599	10,020	10,322	10,469	10,671	10,769
MAIN	21,395	22,656	20,595	21,135	19,040	18,760	18,828	19,533	20,331	20,698	21,181
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	2,070	2,070	2,070	1,973	1,798	1,783	980	1,040	1,380	1,790	990
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	2,070	2,070	2,070	1,973	1,798	1,783	980	1,040	1,380	1,790	990
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	1,770	1,610	1,630	1,630	1,620	1,570	1,600	1,600	1,600	1,600	1,600
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	1,770	1,610	1,630	1,630	1,620	1,570	1,600	1,600	1,600	1,600	1,600
GROUP A	11,131	14,563	15,660	18,394	18,209	18,964	18,082	17,291	19,599	20,034	21,882
GROUP B	20,373	23,039	24,535	25,493	27,043	26,974	28,833	29,772	31,607	31,336	32,798
GROUP C	18,279	20,607	21,651	20,745	20,569	21,571	21,874	22,501	22,866	23,072	23,541
SPP	49,783	58,209	61,846	64,632	65,821	67,509	68,789	69,564	74,072	74,442	78,221
NWPP – U.S.	25,571	26,807	32,489	34,991	36,337	38,399	39,146	38,415	38,859	39,666	41,110
RMPA	12,601	15,120	16,204	17,024	17,959	18,910	19,913	20,995	22,213	23,248	24,326
AZ-NM	21,110	21,896	21,541	22,149	22,490	23,922	25,431	26,334	26,972	28,297	30,181
CA-SNV	12,334	12,628	13,120	11,910	12,660	14,006	14,892	16,378	18,610	19,523	19,611
WSCC – U.S.	71,616	76,451	83,354	86,074	89,446	95,237	99,382	102,122	106,654	110,734	115,228

continued

Other Coal (1000 Tons)

Regional Table 17

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR [b]	—	—	—	—	—	—	—	—	—	—	—
ERCOT	0	0	0	0	0	0	0	0	0	0	118
MAAC	35,411	36,486	36,916	37,243	36,570	36,796	36,781	37,755	36,173	37,950	39,090
MAIN	33,276	35,585	34,917	33,121	33,478	35,516	38,457	39,154	40,541	41,995	42,901
MAPP – U.S.	2,739	3,185	3,444	3,660	3,771	3,900	3,836	3,938	4,103	4,085	4,164
NPCC – U.S.	13,008	14,438	16,550	17,612	19,844	20,054	23,831	26,929	27,449	28,204	28,314
SERC	111,451	122,078	124,347	133,735	136,539	137,206	138,797	144,292	149,505	154,795	159,195
SPP	4,728	5,985	5,489	5,579	5,648	6,449	7,176	7,929	8,127	8,509	9,792
WSCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NERC – U.S.	200,613	217,757	221,663	230,950	235,850	239,921	248,878	259,997	265,898	275,542	283,574
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	10,734	10,018	8,233	5,774	4,568	3,994	2,438	2,538	2,539	3,129	1,518
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	10,734	10,018	8,233	5,774	4,568	3,994	2,438	2,538	2,539	3,129	1,518

Other Coal (1000 Tons)

Subregional Table 17

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	2,986	2,822	2,213	2,555	2,243	2,161	2,214	2,280	2,194	2,344	2,292
EAST MISSOURI	10,604	11,314	11,731	10,276	10,478	10,611	10,880	11,107	11,097	11,197	11,486
SO. CENT. ILL.	13,070	14,405	13,609	13,425	13,711	15,215	17,483	17,524	18,413	19,015	19,102
WUM	6,616	7,044	7,364	6,865	7,046	7,529	7,880	8,243	8,837	9,439	10,021
MAIN	33,276	35,585	34,917	33,121	33,478	35,516	38,457	39,154	40,541	41,995	42,901
NEW YORK	8,820	9,321	10,556	11,083	12,746	12,683	15,270	18,010	18,530	19,300	19,500
NEW ENGLAND	4,188	5,117	5,994	6,529	7,098	7,371	8,561	8,919	8,919	8,904	8,814
NPCC – U.S.	13,008	14,438	16,550	17,612	19,844	20,054	23,831	26,929	27,449	28,204	28,314
NEW BRUNSWICK	604	560	567	565	562	573	578	578	579	579	578
ONTARIO	10,130	9,458	7,666	5,209	4,006	3,421	1,860	1,960	1,960	[illegible]	940
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	10,734	10,018	8,233	5,774	4,568	3,994	2,438	2,538	2,539	3,129	1,518
FLORIDA	7,194	10,060	10,746	13,848	15,276	16,985	18,605	20,271	21,083	22,156	23,551
SOUTHERN	37,851	39,794	42,909	48,870	50,486	49,100	48,002	47,734	50,447	51,739	51,198
TVA	27,526	32,646	30,068	30,003	29,232	29,937	30,506	31,992	33,541	34,984	36,227
VACAR	38,880	39,578	40,624	41,014	41,545	41,184	41,684	44,295	44,434	45,916	48,219
SERC	111,451	122,078	124,347	133,735	136,539	137,206	138,797	144,292	149,505	154,795	159,195
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	660	660	1,238	1,238	1,238	2,051
GROUP C	4,728	5,985	5,489	5,579	5,648	5,789	6,516	6,691	6,889	7,271	7,741
SPP	4,728	5,985	5,489	5,579	5,648	6,449	7,176	7,929	8,127	8,509	9,792
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	0	0	0	0	0	0	0	0	0	0	0

Total Oil (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	4,255	4,400	4,611	4,990	5,367	5,705	6,055	6,435	6,802	7,093	7,157
ERCOT	1,579	708	708	3,290	709	5,347	5,360	4,328	5,564	4,997	3,951
MAAC	32,283	28,304	20,093	17,600	15,906	15,605	15,532	14,950	13,240	15,585	22,868
MAIN	8,246	9,214	7,009	5,295	3,454	3,155	3,675	5,146	6,578	7,693	9,260
MAPP – U.S.	706	771	837	958	1,340	2,195	996	1,164	1,569	1,382	1,154
NPCC – U.S.	111,068	117,856	101,443	95,851	87,372	69,091	57,194	51,677	55,933	60,962	70,328
SERC	59,363	53,634	42,810	39,296	37,664	38,138	38,829	43,392	45,825	49,110	54,722
SPP	2,996	4,544	3,352	3,444	4,688	5,761	6,544	5,754	6,018	8,351	8,830
WSCC – U.S.	16,359	26,088	25,547	27,519	31,016	32,652	32,676	32,345	35,195	31,379	34,337
NERC – U.S.	236,855	245,519	206,410	198,243	187,516	177,649	166,861	165,191	176,724	186,552	212,607
MAPP – CANADA	42	42	42	42	42	42	42	61	89	80	80
NPCC – CANADA	6,731	2,860	2,891	2,516	2,495	2,582	2,452	2,652	3,026	3,232	3,645
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	6,773	2,902	2,933	2,558	2,537	2,624	2,494	2,713	3,115	3,312	3,725

Total Oil (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	7,436	7,687	5,517	3,896	1,917	1,590	1,835	2,897	3,872	4,383	5,252
EAST MISSOURI	222	527	530	531	568	528	552	545	616	551	531
SO. CENT. ILL.	246	639	456	381	506	479	501	517	630	764	922
WUM	342	361	506	487	463	558	787	1,187	1,460	1,995	555
MAIN	8,246	9,214	7,009	5,295	3,454	3,155	3,675	5,146	6,578	7,693	9,260
NEW YORK	55,844	54,853	39,299	43,143	40,903	31,797	29,624	21,778	23,008	23,549	27,118
NEW ENGLAND	55,224	63,003	62,144	52,708	46,469	37,294	27,570	29,899	32,925	37,413	43,210
NPCC – U.S.	111,068	117,856	101,443	95,851	87,372	69,091	57,194	51,677	55,933	60,962	70,328
NEW BRUNSWICK	6,077	2,330	2,410	2,093	2,105	2,197	2,293	2,397	2,496	2,540	2,699
ONTARIO	537	373	324	266	233	228	2	1	1	1	1
QUÉBEC	117	157	157	157	157	157	157	254	529	691	945
NPCC – CANADA	6,731	2,860	2,891	2,516	2,495	2,582	2,452	2,652	3,026	3,232	3,645
FLORIDA	54,284	44,971	36,225	26,291	28,014	28,433	31.938	32,373	33,713	36,072	38,511
SOUTHERN	565	987	1,405	4,658	4,043	2,690	751	827	700	618	598
TVA	402	601	418	417	414	488	546	688	912	1,203	1,565
VACAR	4,112	7,075	4,762	7,930	5,193	6,527	5,594	9,504	10,500	11,217	14,048
SERC	59,363	53,634	42,810	39,296	37,664	38,138	38,829	43,392	45,825	49,110	54,722
GROUP A	2,175	3,991	2,693	2,505	3,467	4,639	5,086	3,760	3,739	3,797	3,828
GROUP B	220	129	188	191	198	195	196	821	971	3,012	3,269
GROUP C	601	424	471	748	1,023	927	1,262	1,173	1,308	1,542	1,733
SPP	2,996	4,544	3,352	3,444	4,688	5,761	6,544	5,754	6,018	8,351	8,830
NWPP – U.S.	203	0	0	0	0	0	0	711	711	711	224
RMPA	74	276	263	343	359	375	364	357	385	406	376
AZ-NM	708	1,504	1,904	2,292	2,342	2,561	2,499	2,786	2,809	2,325	2,204
CA-SNV	15,374	24,308	23,380	24,884	28,315	29,716	29,813	28,491	31,290	27,937	31,533
WSCC – U.S.	16,359	26,088	25,547	27,519	31,016	32,652	32.676	32,345	35,195	31,379	34,337

Total Distillate^{c} Oil (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	2,378	2,453	2,885	3,264	3,641	3,979	4,282	4,552	4,794	5,022	5,086
ERCOT	642	179	176	822	176	1,337	1,346	1,094	1,404	1,261	1,000
MAAC	3,069	1,160	985	966	933	946	962	940	912	959	1,184
MAIN	1,057	1,320	1,380	1,255	1,184	1,279	1,512	1,933	2,323	2,846	3,490
MAPP – U.S.	663	702	775	874	1,219	2,051	891	1,022	1,302	1,146	975
NPCC – U.S.	1,135	1,488	1,076	1,068	1,082	1,598	1,731	1,558	1,473	1,574	1,593
SERC	2,443	3,467	3,476	7,124	6,193	5,231	3,443	4,192	5,184	5,773	6,758
SPP	967	759	739	1,028	1,308	1,216	1,540	1,535	1,901	2,482	3,071
WSCC – U.S.	365	698	863	1,140	1,023	1,173	1,623	2,144	1,488	1,473	1,341
NERC – U.S.	12,719	12,226	12,355	17,541	16,759	18,810	17,330	18,970	20,781	22,536	24,498
MAPP – CANADA	42	42	42	42	42	42	42	61	89	80	80
NPCC – CANADA	323	275	232	172	141	136	0	13	76	161	323
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	365	317	274	214	183	178	42	74	165	241	403

Total Distillate^{c} Oil (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	365	244	175	83	30	24	33	59	102	136	219
EAST MISSOURI	201	515	512	508	509	515	513	507	573	519	512
SO. CENT. ILL.	149	200	187	184	189	189	186	187	195	203	211
WUM	342	361	506	480	456	551	780	1,180	1,453	1,988	2,548
MAIN	1,057	1,320	1,380	1,255	1,184	1,279	1,512	1,933	2,323	2,846	3,490
NEW YORK	411	777	365	392	406	973	1,106	848	678	609	628
NEW ENGLAND	724	711	711	676	676	625	625	710	795	965	965
NPCC – U.S.	1,135	1,488	1,076	1,068	1,082	1,598	1,731	1,558	1,473	1,574	1,593
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	323	275	232	172	141	136	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	13	76	161	323
NPCC – CANADA	323	275	232	172	141	136	0	13	76	161	323
FLORIDA	708	436	443	432	433	512	458	445	449	454	541
SOUTHERN	448	714	1,033	3,946	3,411	2,269	550	514	580	505	471
TVA	402	601	418	417	414	488	546	688	912	1,203	1,565
VACAR	885	1,716	1,582	2,329	1,935	1,962	1,889	2,545	3,243	3,611	4,181
SERC	2,443	3,467	3,476	7,124	6,193	5,231	3,443	4,192	5,184	5,773	6,758
GROUP A	522	326	280	285	289	308	311	398	315	363	358
GROUP B	131	111	110	133	140	137	138	137	438	738	1,138
GROUP C	314	322	349	610	879	771	1,091	1,000	1,148	1,381	1,575
SPP	967	759	739	1,028	1,308	1,216	1,540	1,535	1,901	2,482	3,071
NWPP – U.S.	0	0	0	0	0	0	0	487	487	487	0
RMPA	74	2	2	2	2	2	2	2	2	2	2
AZ-NM	21	302	352	735	618	770	732	647	600	585	732
CA-SNV	270	394	509	403	403	401	889	1,008	399	399	607
WSCC – U.S.	365	698	863	1,140	1,023	1,173	1,623	2,144	1,488	1,473	1,341

continued

Distillate[c] Oil – Steam (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR[d]	2,111	1,926	1,886	1,843	1,843	1,843	1,843	1,843	1,843	1,802	1,614
ERCOT	563	174	172	817	172	1,335	1,344	1,092	1,402	1,259	998
MAAC	2,061	733	737	759	730	784	780	790	776	783	887
MAIN	801	896	929	984	918	941	957	971	971	1,008	1,038
MAPP – U.S.	515	491	527	514	536	534	526	526	532	563	582
NPCC – U.S.	235	200	200	175	175	170	170	170	170	170	170
SERC	1,513	2,159	2,298	2,957	2,915	2,873	2,310	2,408	2,515	2,399	2,483
SPP	783	556	545	665	672	704	720	817	755	756	749
WSCC – U.S.	89	0	0	0	0	0	0	0	0	0	0
NERC – U.S.	8,671	7,135	7,294	8,714	7,961	9,184	8,650	8,617	8,964	8,740	8,521
MAPP – CANADA	42	42	42	42	42	42	42	61	89	80	80
NPCC – CANADA	293	245	202	142	111	106	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	335	287	244	184	153	148	42	61	89	80	80

Distillate[c] Oil – Steam (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	260	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	170	474	471	467	468	474	472	466	464	477	467
SO. CENT. ILL.	141	175	175	176	178	176	173	172	177	182	184
WUM	230	247	283	341	272	291	312	333	330	349	387
MAIN	801	896	929	984	918	941	957	971	971	1,008	1,038
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	235	200	200	175	175	170	170	170	170	170	170
NPCC – U.S.	235	200	200	175	175	170	170	170	170	170	170
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	293	245	202	142	111	106	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	293	245	202	142	111	106	0	0	0	0	0
FLORIDA	138	100	116	139	128	188	179	174	177	179	178
SOUTHERN	383	556	678	1,134	1,068	940	426	427	428	274	230
TVA	300	337	312	312	306	313	319	334	349	363	376
VACAR	692	1,166	1,192	1,372	1,413	1,432	1,386	1,473	1,561	1,583	1,699
SERC	1,513	2,159	2,298	2,957	2,915	2,873	2,310	2,408	2,515	2,399	2,483
GROUP A	492	303	271	276	276	282	282	353	277	264	256
GROUP B	70	70	69	92	99	96	97	96	97	97	97
GROUP C	221	183	205	297	297	326	341	368	381	395	396
SPP	783	556	545	665	672	704	720	817	755	756	749
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	65	0	0	0	0	0	0	0	0	0	0
AZ-NM	10	0	0	0	0	0	0	0	0	0	0
CA-SNV	14	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	89	0	0	0	0	0	0	0	0	0	0

continued

Distillate Oil – Combustion Turbine (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	267	527	999	1,421	1,798	2,136	2,439	2,709	2,951	3,220	3,472
ERCOT	70	0	0	0	0	0	0	0	0	0	0
MAAC	826	258	137	122	128	103	123	100	96	129	226
MAIN	256	424	451	271	266	338	555	962	1,352	1,838	2,452
MAPP – U.S.	148	211	248	360	683	1,517	365	496	770	583	393
NPCC – U.S.	582	948	536	553	567	1,088	1,221	963	793	724	743
SERC	896	1,308	1,178	4,167	3,278	2,358	1,133	1,784	2,669	3,374	4,275
SPP	179	203	194	363	636	512	820	718	1,146	1,726	2,322
WSCC – U.S.	257	418	517	559	559	556	1,046	1,658	971	947	699
NERC – U.S.	3,481	4,297	4,260	7,816	7,915	8,608	7,702	9,390	10,748	12,541	14,582
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	30	30	30	30	30	30	0	13	76	161	323
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	30	30	30	30	30	30	0	13	76	161	323

Distillate Oil – Combustion Turbine (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	105	244	175	83	30	24	33	59	102	136	219
EAST MISSOURI	31	41	41	41	41	41	41	41	109	42	45
SO. CENT. ILL.	8	25	12	8	11	13	13	15	18	21	27
WUM	112	114	223	139	184	260	468	847	1,123	1,639	2,161
MAIN	256	424	451	271	266	338	555	962	1,352	1,838	2,452
NEW YORK	411	777	365	392	406	973	1,106	848	678	609	628
NEW ENGLAND	171	171	171	161	161	115	115	115	115	115	115
NPCC – U.S.	582	948	536	553	567	1,088	1,221	963	793	724	743
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	30	30	30	30	30	30	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	13	76	161	323
NPCC – CANADA	30	30	30	30	30	30	0	13	76	161	323
FLORIDA	538	336	327	293	305	324	279	271	272	275	363
SOUTHERN	63	158	355	2,812	2,343	1,329	124	87	152	231	241
TVA	102	264	106	105	108	175	227	354	563	840	1,189
VACAR	193	550	390	957	522	530	503	1,072	1,682	2,028	2,482
SERC	896	1,308	1,178	4,167	3,278	2,358	1,133	1,784	2,669	3,374	4,275
GROUP A	25	23	9	9	13	26	29	45	38	99	102
GROUP B	61	41	41	41	41	41	41	41	341	641	1,041
GROUP C	93	139	144	313	582	445	750	632	767	986	1,179
SPP	179	203	194	363	636	512	820	718	1,146	1,726	2,322
NWPP – U.S.	0	0	0	0	0	0	0	487	487	487	0
RMPA	9	2	2	2	2	2	2	2	2	2	2
AZ-NM	7	44	32	179	179	176	178	182	100	76	109
CA-SNV	241	372	483	378	378	378	866	987	382	382	588
WSCC – U.S.	257	418	517	559	559	556	1,046	1,658	971	947	699

continued

Distillate[c] Oil – Combined Cycle (1000 Barrels) Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	9	5	4	5	4	2	2	2	2	2	2
MAAC	182	169	111	85	75	59	59	50	40	47	71
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	318	340	340	340	340	340	340	425	510	680	680
SERC	34	0	0	0	0	0	0	0	0	0	0
SPP	5	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	19	280	346	581	464	617	577	486	517	526	642
NERC – U.S.	567	794	801	1,011	883	1,018	978	963	1,069	1,255	1,395
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Distillate[c] Oil – Combined Cycle (1000 Barrels) Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	318	340	340	340	340	340	340	425	510	680	680
NPCC – U.S.	318	340	340	340	340	340	340	425	510	680	680
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	32	0	0	0	0	0	0	0	0	0	0
SOUTHERN	2	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	34	0	0	0	0	0	0	0	0	0	0
GROUP A	5	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	5	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	4	258	320	556	439	594	554	465	500	509	623
CA-SNV	15	22	26	25	25	23	23	21	17	17	19
WSCC – U.S.	19	280	346	581	464	617	577	486	517	526	642

continued

Total Residual Oil (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	1,877	1,947	1,726	1,726	1,726	1,726	1,773	1,883	2,008	2,071	2,071
ERCOT	937	529	532	2,468	533	4,010	4,014	3,234	4,160	3,736	2,951
MAAC	29,214	27,144	19,108	16,634	14,973	14,659	14,570	14,010	12,328	14,626	21,684
MAIN	7,189	7,894	5,629	4,040	2,270	1,876	2,163	3,213	4,255	4,847	5,770
MAPP – U.S.	28	51	44	66	103	126	87	124	249	218	161
NPCC – U.S.	109,933	116,368	100,367	94,783	86,290	67,493	55,463	50,119	54,460	59,388	68,735
SERC	56,920	50,167	39,334	32,172	31,471	32,907	35,386	39,200	40,641	43,337	47,964
SPP	2,029	3,785	2,613	2,416	3,380	4,545	5,004	4,219	4,117	5,869	5,759
WSCC – U.S.	15,993	25,090	24,125	26,168	29,795	31,230	30,856	29,994	33,417	29,616	32,681
NERC – U.S.	224,120	232,975	193,478	180,473	170,541	158,572	149,316	145,996	155,635	163,708	187,776
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	6,408	2,585	2,659	2,344	2,354	2,446	2,452	2,639	2,950	3,071	3,322
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	6,408	2,585	2,659	2,344	2,354	2,446	2,452	2,639	2,950	3,071	3,322

Total Residual Oil (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	7,071	7,443	5,342	3,813	1,887	1,566	1,802	2,838	3,770	4,247	5,033
EAST MISSOURI	21	12	18	23	59	13	39	38	43	32	19
SO. CENT. ILL.	97	439	269	197	317	290	315	330	435	561	711
WUM	0	0	0	7	7	7	7	7	7	7	7
MAIN	7,189	7,894	5,629	4,040	2,270	1,876	2,163	3,213	4,255	4,847	5,770
NEW YORK	55,433	54,076	38,934	42,751	40,497	30,824	28,518	20,930	22,330	22,940	26,490
NEW ENGLAND	54,500	62,292	61,433	52,032	45,793	36,669	26,945	29,189	32,130	36,448	42,245
NPCC – U.S.	109,933	116,368	100,367	94,783	86,290	67,493	55,463	50,119	54,460	59,388	68,735
NEW BRUNSWICK	6,077	2,330	2,410	2,093	2,105	2,197	2,293	2,397	2,496	2,540	2,699
ONTARIO	214	98	92	94	92	92	2	1	1	1	1
QUÉBEC	117	157	157	157	157	157	157	241	453	530	622
NPCC – CANADA	6,408	2,585	2,659	2,344	2,354	2,446	2,452	2,639	2,950	3,071	3,322
FLORIDA	53,576	44,535	35,782	25,859	27,581	27,921	31,480	31,928	33,264	35,618	37,970
SOUTHERN	117	273	372	712	632	421	201	313	120	113	127
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	3,227	5,359	3,180	5,601	3,258	4,565	3,705	6,959	7,257	7,606	9,867
SERC	56,920	50,167	39,334	32,172	31,471	32,907	35,386	39,200	40,641	43,337	47,964
GROUP A	1,653	3,665	2,413	2,220	3,178	4,331	4,775	3,362	3,424	3,434	3,470
GROUP B	89	18	78	58	58	58	58	684	533	2,274	2,131
GROUP C	287	102	122	138	144	156	171	173	160	161	158
SPP	2,029	3,785	2,613	2,416	3,380	4,545	5,004	4,219	4,117	5,869	5,759
NWPP – U.S.	203	0	0	0	0	0	0	224	224	224	224
RMPA	0	157	145	215	229	237	228	211	231	243	204
AZ-NM	686	1,019	1,109	1,472	1,654	1,678	1,704	2,076	2,071	1,611	1,327
CA-SNV	15,104	23,914	22,871	24,481	27,912	29,315	28,924	27,483	30,891	27,538	30,926
WSCC – U.S.	15,993	25,090	24,125	26,168	29,795	31,230	30,856	29,994	33,417	29,616	32,681

continued

Residual Oil[f] – Steam (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR[d]	1,877	1,947	1,726	1,726	1,726	1,726	1,773	1,883	2,008	2,071	2,071
ERCOT	937	529	532	2,468	533	4,010	4,014	3,234	4,160	3,736	2,951
MAAC	29,214	27,144	19,108	16,634	14,973	14,659	14,570	14,010	12,328	14,626	21,684
MAIN	7,189	7,894	5,629	4,033	2,263	1,869	2,156	3,206	4,248	4,840	5,763
MAPP – U.S.	28	51	44	66	103	126	87	124	249	218	161
NPCC – U.S.	109,661	116,026	100,027	94,443	85,950	67,153	55,123	49,694	53,950	58,708	68,055
SERC	56,205	49,924	39,078	31,992	31,260	32,682	35,102	38,918	40,349	43,036	47,613
SPP	2,027	3,785	2,613	2,416	3,380	4,545	5,004	3,593	3,642	3,653	3,686
WSCC – U.S.	15,969	25,050	24,096	26,079	29,694	31,129	30,762	29,927	33,338	29,534	32,647
NERC – U.S.	223,107	232,352	192,853	179,857	169,882	157,899	148,591	144,589	154,272	160,422	184,631
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	6,407	2,585	2,659	2,344	2,354	2,446	2,452	2,639	2,950	3,071	3,322
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	6,407	2,585	2,659	2,344	2,354	2,446	2,452	2,639	2,950	3,071	3,322

Residual[f] Oil – Steam (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	7,071	7,443	5,342	3,813	1,887	1,566	1,802	2,838	3,770	4,247	5,033
EAST MISSOURI	21	12	18	23	59	13	39	38	43	32	19
SO. CENT. ILL.	97	439	269	197	317	290	315	330	435	561	711
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	7,189	7,894	5,629	4,033	2,263	1,869	2,156	3,206	4,248	4,840	5,763
NEW YORK	55,433	54,076	38,934	42,751	40,497	30,824	26,518	20,930	22,330	22,940	26,490
NEW ENGLAND	54,228	61,952	61,093	51,692	45,453	36,329	26,605	28,764	31,620	35,768	41,565
NPCC – U.S.	109,661	116,026	100,027	94,443	85,950	67,153	55,123	49,694	53,950	58,708	68,055
NEW BRUNSWICK	6,076	2,330	2,410	2,093	2,105	2,197	2,293	2,397	2,496	2,540	2,699
ONTARIO	214	98	92	94	92	92	2	1	1	1	1
QUÉBEC	117	157	157	157	157	157	157	241	453	530	622
NPCC – CANADA	6,407	2,585	2,659	2,344	2,354	2,446	2,452	2,639	2,950	3,071	3,322
FLORIDA	52,862	44,292	35,526	25,679	27,370	27,696	31,196	31,646	32,972	35,317	37,619
SOUTHERN	116	273	372	712	632	421	201	313	120	113	127
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	3,227	5,359	3,180	5,601	3,258	4,565	3,705	6,959	7,257	7,606	9,867
SERC	56,205	49,924	39,078	31,992	31,260	32,682	35,102	38,918	40,349	43,036	47,613
GROUP A	1,651	3,665	2,413	2,220	3,178	4,331	4,775	3,362	3,424	3,434	3,470
GROUP B	89	18	78	58	58	58	58	58	58	58	58
GROUP C	287	102	122	138	144	156	171	173	160	161	158
SPP	2,027	3,785	2,613	2,416	3,380	4,545	5,004	3,593	3,642	3,653	3,686
NWPP – U.S.	203	0	0	0	0	0	0	224	224	224	224
RMPA	0	117	116	126	128	136	134	144	152	161	170
AZ-NM	662	1,019	1,109	1,472	1,654	1,678	1,704	2,076	2,071	1,611	1,327
CA-SNV	15,104	23,914	22,871	24,481	27,912	29,315	28,924	27,483	30,891	27,538	30,926
WSCC – U.S.	15,969	25,050	24,096	26,079	29,694	31,129	30,762	29,927	33,338	29,534	32,647

Residual Oil – Combustion Turbine (1000 Barrels)

Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	7	7	7	7	7	7	7	7
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	219	243	256	180	211	225	284	282	292	301	351
SPP	0	0	0	0	0	0	0	626	475	2,216	2,073
WSCC – U.S.	0	40	29	89	101	101	94	67	79	82	34
NERC – U.S.	219	283	285	276	319	333	385	982	853	2,606	2,465
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	1	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	1	0	0	0	0	0	0	0	0	0	0

Residual Oil – Combustion Turbine (1000 Barrels)

Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	7	7	7	7	7	7	7	7
MAIN	0	0	0	7	7	7	7	7	7	7	7
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	1	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	1	0	0	0	0	0	0	0	0	0	0
FLORIDA	218	243	256	180	211	225	284	282	292	301	351
SOUTHERN	1	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	219	243	256	180	211	225	284	282	292	301	351
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	626	475	2,216	2,073
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	626	475	2,216	2,073
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	40	29	89	101	101	94	67	79	82	34
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	0	40	29	89	101	101	94	67	79	82	34

continued

Residual Oil – Combined Cycle (1000 Barrels) Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	272	340	340	340	340	340	340	425	510	680	680
SERC	496	0	0	0	0	0	0	0	0	0	0
SPP	2	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	24	0	0	0	0	0	0	0	0	0	0
NERC – U.S.	794	340	340	340	340	340	340	425	510	680	680
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Residual Oil – Combined Cycle (1000 Barrels) Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	272	340	340	340	340	340	340	425	510	680	680
NPCC – U.S.	272	340	340	340	340	340	340	425	510	680	680
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	496	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	496	0	0	0	0	0	0	0	0	0	0
GROUP A	2	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	2	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	24	0	0	0	0	0	0	0	0	0	0
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	24	0	0	0	0	0	0	0	0	0	0

continued

Total Crude Oil – Steam (1000 Barrels) Regional Table 18

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	0	0	0	0	0	0	0	0	0	0	0
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	15	18	18	18	18	18	18	18	18	18	18
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	1	300	559	211	198	249	197	207	290	290	315
NERC – U.S.	16	318	577	229	216	267	215	225	308	308	333
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Total Crude Oil – Steam (1000 Barrels) Subregional Table 18

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	0	0	0	0	0	0	0	0	0	0	0
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	117	116	126	128	136	134	144	152	161	170
AZ-NM	1	183	443	85	70	113	63	63	138	129	145
CA-SNV	0	0	0	0	0	0	0	0	0	0	0
WSCC – U.S.	1	300	559	211	198	249	197	207	290	290	315

Total Natural Gas (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	10,696	8,203	10,569	14,922	16,439	17,425	16,168	16,947	17,570	18,070	18,470
ERCOT	981,835	1,037,018	1,091,919	1,086,026	1,065,160	1,034,608	1,046,028	1,013,951	1,003,586	1,006,032	1,004,672
MAAC	72,268	72,090	53,591	43,414	41,514	38,929	39,337	32,412	33,834	33,568	10,118
MAIN	12,942	13,732	7,170	4,188	3,350	3,194	3,193	4,159	5,120	5,082	7,091
MAPP – U.S.	6,748	3,186	2,269	2,212	2,677	3,028	2,672	3,305	3,639	2,883	2,840
NPCC – U.S.	170,246	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
SERC	193,689	157,663	144,683	137,101	139,042	126,867	106,286	97,233	96,775	96,814	90,675
SPP	1,041,455	974,556	951,388	832,071	813,059	818,195	818,524	823,559	807,811	819,150	836,553
WSCC – U.S.	593,486	811,541	656,827	630,500	591,454	560,402	554,240	553,023	523,626	542,392	493,969
NERC – U.S.	3,083,365	3,173,506	3,003,536	2,761,009	2,682,742	2,611,298	2,586,448	2,544,589	2,491,961	2,523,991	2,464,388
MAPP – CANADA	13,053	8,872	9,145	9,216	8,194	8,193	8,339	8,923	9,218	9,440	9,218
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	41,107	37,053	39,824	43,260	43,382	37,021	37,310	69,225	68,463	67,729	67,464
NERC – CANADA	54,160	45,925	48,969	52,476	51,576	45,214	45,649	78,148	77,681	77,169	76,682

Total Natural Gas (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	7,079	4,629	3,458	2,008	1,035	508	659	1,158	1,874	2,355	3,597
EAST MISSOURI	755	160	210	260	260	260	260	260	260	260	260
SO. CENT. ILL.	782	2,715	1,887	1,648	1,791	2,040	1,763	2,031	2,553	1,915	2,479
WUM	4,326	6,228	1,615	272	264	386	511	710	433	552	755
MAIN	12,942	13,732	7,170	4,188	3,350	3,194	3,193	4,159	5,120	5,082	7,091
NEW YORK	153,899	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
NEW ENGLAND[g]	16,347	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	170,246	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	180,398	143,422	129,953	115,899	116,609	107,201	86,530	83,342	81,954	80,077	79,215
SOUTHERN	10,261	10,757	11,674	16,772	17,675	15,415	16,541	10,729	11,960	11,478	9,474
TVA[h]	1	—	—	—	—	—	—	—	—	—	—
VACAR	3,029	3,484	3,056	4,430	4,758	4,251	3,215	3,162	2,861	5,259	1,986
SERC	193,689	157,663	144,683	137,101	139,042	126,867	106,286	97,233	96,775	96,814	90,675
GROUP A	607,349	579,323	543,900	446,383	432,127	439,634	441,400	464,908	446,560	451,145	472,753
GROUP B	377,763	351,077	368,319	352,521	348,391	344,523	347,164	327,248	327,282	330.969	326,049
GROUP C	56,343	44,156	39,169	33,167	32,541	34,038	29,960	31,403	33,969	37,036	37,751
SPP	1,041,455	974,556	951,388	832,071	813,059	818,195	818,524	823,559	807,811	819,150	836,553
NWPP – U.S.	7,602	937	8,445	8,547	8,547	8,547	10,563	19,176	21,603	22,466	22,640
RMPA	6,133	9,861	8,406	11,505	12,234	12,401	12,154	11,253	12,196	11,291	10,775
AZ-NM	63,186	73,345	54,668	37,691	40,218	32,759	34,888	33,241	35,981	39,069	34,268
CA-SNV	516,565	727,398	585,308	572,757	530,455	506,695	496,635	489,353	453,846	469,566	426,286
WSCC – U.S.	593,486	811,541	656,827	630,500	591,454	560,402	554,240	553,023	523,626	542,392	493,969

continued

Total Firm Natural Gas (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	838,636	837,940	875,295	871,926	863,090	830,710	830,147	804,311	794,591	796,590	795,479
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	8,837	5,831	4,328	2,928	1,955	1,428	1,579	2,078	2,794	3,275	4,517
MAPP – U.S.	535	704	747	754	666	730	795	861	930	945	1,016
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	187,268	151,784	138,184	128,249	129,863	119,294	98,762	90,709	90,601	88,239	85,361
SPP	639,085	598,799	600,449	479,129	454,967	442,358	443,824	451,018	456,272	461,982	478,246
WSCC – U.S.	391,665	390,098	323,912	319,754	300,851	284,720	280,901	286,867	301,593	315,612	299,768
NERC – U.S.	2,066,026	1,975,156	1,942,915	1,802,740	1,751,392	1,679,240	1,656,008	1,635,844	1,646,781	1,666,643	1,664,387
MAPP – CANADA	7,153	2,872	3,145	3,216	2,194	2,193	2,339	2,923	3,218	3,440	3,218
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	40,811	37,053	39,824	43,260	43,382	37,021	37,310	36,640	35,878	35,144	34,879
NERC – CANADA	47,964	39,925	42,969	46,476	45,576	39,214	39,649	39,563	39,096	38,584	38,097

Total Firm Natural Gas (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	7,079	4,629	3,458	2,008	1,035	508	659	1,158	1,874	2,355	3,597
EAST MISSOURI	110	160	210	260	260	260	260	260	260	260	260
SO. CENT. ILL.	579	660	660	660	660	660	660	660	660	660	660
WUM	1,069	382	0	0	0	0	0	0	0	0	0
MAIN	8,837	5,831	4,328	2,928	1,955	1,428	1,579	2,078	2,794	3,275	4,517
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	180,398	143,422	129,953	115,899	116,609	107,201	86,530	83,342	81,954	80,077	79,215
SOUTHERN	6,870	8,362	8,231	12,350	13,254	12,093	12,232	7,367	8,647	8,162	6,146
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	187,268	151,784	138,184	128,249	129,863	119,294	98,762	90,709	90,601	88,239	85,361
GROUP A	277,720	257,203	265,724	167,970	144,284	140,348	144,803	158,488	162,624	165,091	186,796
GROUP B	330,169	307,265	312,025	299,598	299,443	290,256	287,769	281,581	282,680	286,124	281,003
GROUP C	31,176	24,331	22,700	11,561	11,240	11,754	11,252	10,949	10,968	10,767	10,447
SPP	639,085	588,799	600,449	479,129	454,967	442,358	443,824	451,018	456,272	461,982	478,246
NWPP – U.S.	5,453	327	3,491	3,582	3,582	3,582	3,930	8,464	10,624	11,392	11,760
RMPA	4,316	9,477	8,074	10,491	10,991	11,272	11,049	10,459	11,361	10,525	10,448
AZ-NM	62,021	72,478	51,717	37,691	40,218	32,759	34,888	33,241	35,981	39,069	34,268
CA-SNV	319,875	307,816	260,630	267,990	246,060	237,107	231,034	234,703	243,627	254,626	243,292
WSCC – U.S.	391,665	390,098	323,912	319,754	300,851	284,720	280,901	286,867	301,593	315,612	299,768

Firm Natural Gas – Steam (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	800,605	802,656	841,302	838,546	829,332	799,532	795,030	770,270	760,005	761,383	761,504
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	4,507	1,044	761	809	767	310	310	310	310	310	310
MAPP – U.S.	467	474	504	524	571	622	673	726	781	823	881
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	176,469	115,056	105,833	92,512	92,338	80,310	70,658	68,337	67,130	64,080	59,975
SPP	615,145	563,858	573,397	453,257	431,359	417,165	417,437	424,375	427,825	431,963	447,576
WSCC – U.S.	358,057	340,914	280,812	274,941	251,327	231,088	226,822	231,928	248,055	262,783	247,946
NERC – U.S.	1,955,250	1,824,002	1,802,609	1,660,589	1,605,694	1,529,027	1,510,930	1,495,946	1,504,106	1,521,342	1,518,192
MAPP – CANADA	7,153	2,872	3,145	3,216	2,194	2,193	2,339	2,923	3,218	3,440	3,218
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	30,993	25,203	26,872	30,587	30,723	25,232	25,463	24,822	24,234	23,573	23,279
NERC – CANADA	38,146	28,075	30,017	33,803	32,917	27,425	27,802	27,745	27,452	27,013	26,497

Firm Natural Gas – Steam (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	3,434	500	501	499	457	0	0	0	0	0	0
EAST MISSOURI	100	150	200	250	250	250	250	250	250	250	250
SO. CENT. ILL.	44	60	60	60	60	60	60	60	60	60	60
WUM	929	334	0	0	0	0	0	0	0	0	0
MAIN	4,507	1,044	761	809	767	310	310	310	310	310	310
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	172,606	108,709	99,617	83,177	82,099	71,232	62,441	61,985	61,498	60,933	57,844
SOUTHERN	3,863	6,347	6,216	9,335	10,239	9,078	8,217	6,352	5,632	3,147	2,131
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	176,469	115,056	105,833	92,512	92,338	80,310	70,658	68,337	67,130	64,080	59,975
GROUP A	277,575	256,633	264,906	167,423	143,458	139,733	144,272	157,936	162,027	164,320	185,793
GROUP B	307,015	283,436	286,333	274,815	277,203	266,220	262,455	256,032	255,372	257,418	251,878
GROUP C	30,555	23,789	22,158	11,019	10,698	11,212	10,710	10,407	10,426	10,225	9,905
SPP	615,145	563,858	573,397	453,257	431,359	417,165	417,437	424,375	427,825	431,963	447,576
NWPP – U.S.	5,453	327	3,491	3,582	3,582	3,582	3,930	8,464	10,624	11,392	11,760
RMPA	3,755	7,700	7,040	7,348	7,436	7,678	7,733	8,063	8,503	8,151	9,394
AZ-NM	49,281	54,033	39,516	28,495	28,997	20,795	22,082	20,066	21,100	25,505	22,412
CA-SNV	299,568	278,854	230,765	235,516	211,312	199,033	193,077	195,335	207,828	217,735	204,380
WSCC – U.S.	358,057	340,914	280,812	274,941	251,327	231,088	226,822	231,928	248,055	262,783	247,946

continued

Firm Natural Gas – Combustion Turbine (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	6,793	454	1,018	757	1,018	1,024	3,041	3,039	3,560	3,995	4,190
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	4,330	4,787	3,567	2,119	1,188	1,118	1,269	1,768	2,484	2,965	4,207
MAPP – U.S.	68	230	243	230	95	108	122	135	149	122	135
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	7,773	22,379	25,065	24,689	24,865	28,453	17,222	12,292	12,845	13,996	12,313
SPP	1,093	1,425	1,695	1,406	1,696	1,449	1,370	1,598	1,431	2,017	2,220
WSCC – U.S.	4,326	6,189	5,971	6,626	11,811	18,436	18,154	18,368	16,117	15,869	15,371
NERC – U.S.	24,383	35,464	37,559	35,827	40,673	50,588	41,178	37,200	36,586	38,964	38,436
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	9,818	11,850	12,952	12,673	12,659	11,789	11,847	11,818	11,644	11,571	11,600
NERC – CANADA	9,818	11,850	12,952	12,673	12,659	11,789	11,847	11,818	11,644	11,571	11,600

Firm Natural Gas – Combustion Turbine (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	3,645	4,129	2,957	1,509	578	508	659	1,158	1,874	2,355	3,597
EAST MISSOURI	10	10	10	10	10	10	10	10	10	10	10
SO. CENT. ILL.	535	600	600	600	600	600	600	600	600	600	600
WUM	140	48	0	0	0	0	0	0	0	0	0
MAIN	4,330	4,787	3,567	2,119	1,188	1,118	1,269	1,768	2,484	2,965	4,207
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	4,766	20,364	23,050	21,674	21,850	25,438	13,207	11,277	9,830	8,981	8,298
SOUTHERN	3,007	2,015	2,015	3,015	3,015	3,015	4,015	1,015	3,015	5,015	4,015
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	7,773	22,379	25,065	24,689	24,865	28,453	17,222	12,292	12,845	13,996	12,313
GROUP A	145	570	818	547	826	615	531	552	597	771	1,003
GROUP B	327	313	335	317	328	292	297	504	292	704	675
GROUP C	621	542	542	542	542	542	542	542	542	542	542
SPP	1,093	1,425	1,695	1,406	1,696	1,449	1,370	1,598	1,431	2,017	2,220
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	561	1,777	1,034	3,143	3,555	3,594	3,316	2,396	2,858	2,374	1,054
AZ-NM	2,588	1,572	1,168	1,005	3,515	6,782	6,873	6,619	7,449	6,613	5,398
CA-SNV	1,177	2,840	3,769	2,478	4,741	8,060	7,965	9,353	5,810	6,882	8,919
WSCC – U.S.	4,326	6,189	5,971	6,626	11,811	18,436	18,154	18,368	16,117	15,869	15,371

Firm Natural Gas – Combined Cycle (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	31,238	34,830	32,975	32,623	32,740	30,154	32,076	31,002	31,026	31,212	29,785
MAAC	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
SERC	3,026	14,349	7,286	11,048	12,660	10,531	10,882	10,080	10,626	10,163	13,073
SPP	22,847	23,516	25,357	24,466	21,912	23,744	25,017	25,045	27,016	28,002	28,450
WSCC – U.S.	29,282	42,995	37,129	38,187	37,713	35,196	35,925	36,571	37,421	36,960	36,451
NERC – U.S.	86,393	115,690	102,747	106,324	105,025	99,625	103,900	102,698	106,089	106,337	107,759
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Firm Natural Gas – Combined Cycle (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	0	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	0	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	3,026	14,349	7,286	11,048	12,660	10,531	10,882	10,080	10,626	10,163	13,073
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	3,026	14,349	7,286	11,048	12,660	10,531	10,882	10,080	10,626	10,163	13,073
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	22,847	23,516	25,357	24,466	21,912	23,744	25,017	25,045	27,016	28,002	28,450
GROUP C	0	0	0	0	0	0	0	0	0	0	0
SPP	22,847	23,516	25,357	24,466	21,912	23,744	25,017	25,045	27,016	28,002	28,450
NWPP – U.S.	0	0	0	0	0	0	0	0	0	0	0
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	10,152	16,873	11,033	8,191	7,706	5,182	5,933	6,556	7,432	6,951	6,458
CA-SNV	19,130	26,122	26,096	29,996	30,007	30,014	29,992	30,015	29,989	30,009	29,993
WSCC – U.S.	29,282	42,995	37,129	38,187	37,713	35,196	35,925	36,571	37,421	36,960	36,451

continued

Total Interruptible Natural Gas (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	10,696	8,203	10,569	14,922	16,439	17,425	16,168	16,947	17,570	18,070	18,470
ERCOT	143,199	199,078	216,624	214,100	202,070	203,898	215,881	209,640	208,995	209,442	209,193
MAAC	72,268	72,090	53,591	43,414	41,514	38,929	39,337	32,412	33,834	33,568	10,118
MAIN	4,105	7,901	2,842	1,260	1,395	1,766	1,614	2,081	2,326	1,807	2,574
MAPP – U.S.	6,213	2,482	1,522	1,458	2,011	2,298	1,877	2,444	2,709	1,938	1,824
NPCC – U.S.	170,246	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
SERC	6,421	5,879	6,499	8,852	9,179	7,573	7,524	6,524	6,174	8,575	5,314
SPP	402,370	385,757	350,939	352,942	358,092	375,837	374,700	372,541	351,539	357,168	358,307
WSCC – U.S.	201,821	421,443	332,915	310,746	290,603	275,682	273,339	266,156	222,033	226,780	194,201
NERC – U.S.	1,017,339	1,198,350	1,060,621	958,269	931,350	932,058	930,440	908,745	845,180	857,348	800,001
MAPP – CANADA	5,900	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	296	0	0	0	0	0	0	32,585	32,585	32,585	32,585
NERC – CANADA	6,196	6,000	6,000	6,000	6,000	6,000	6,000	38,585	38,585	38,585	38,585

Total Interruptible Natural Gas (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	645	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	203	2,055	1,227	988	1,131	1,380	1,103	1,371	1,893	1,255	1,819
WUM	3,257	5,846	1,615	272	264	386	511	710	433	552	755
MAIN	4,105	7,901	2,842	1,260	1,395	1,766	1,614	2,081	2,326	1,807	2,574
NEW YORK	153,899	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
NEW ENGLAND[g]	16,347	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	170,246	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	3,391	2,395	3,443	4,422	4,421	3,322	4,309	3,362	3,313	3,316	3,328
TVA[h]	1	—	—	—	—	—	—	—	—	—	—
VACAR	3,029	3,484	3,056	4,430	4,758	4,251	3,215	3,162	2,861	5,259	1,986
SERC	6,421	5,879	6,499	8,852	9,179	7,573	7,524	6,524	6,174	8,575	5,314
GROUP A	329,629	322,120	278,176	278,413	287,843	299,286	296,597	306,420	283,936	286,054	285,957
GROUP B	47,574	43,812	56,294	52,923	48,948	54,267	59,395	45,667	44,602	44,845	45,046
GROUP C	25,167	19,825	16,469	21,606	21,301	22,284	18,708	20,454	23,001	26,269	27,304
SPP	402,370	385,757	350,939	352,942	358,092	375,837	374,700	372,541	351,539	357,168	358,307
NWPP – U.S.	2,149	610	4,954	4,965	4,965	4,965	6,633	10,712	10,979	11,074	10,880
RMPA	1,817	384	332	1,014	1,243	1,129	1,105	794	835	766	327
AZ-NM	1,165	867	2,951	0	0	0	0	0	0	0	0
CA-SNV	196,690	419,582	324,678	304,767	284,395	269,588	265,601	254,650	210,219	214,940	182,994
WSCC – U.S.	201,821	421,443	332,915	310,746	290,603	275,682	273,339	266,156	222,033	226,780	194,201

Interruptible[1] Natural Gas – Steam (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR [1]	8,373	5,248	5,248	7,707	7,707	7,478	5,248	5,248	5,248	5,248	5,248
ERCOT	136,172	192,269	208,768	206,130	194,271	197,040	208,989	201,855	201.188	201,733	201,394
MAAC	56,691	57,489	45,136	37,240	35,924	34,407	34,552	28,573	30,669	29,811	8,280
MAIN	3,686	6,307	1,573	828	861	1,199	986	1,365	1,358	801	1,135
MAPP – U.S.	6,005	2,004	1,120	1,027	1,562	1,739	1,347	1,894	2,136	1,335	1,162
NPCC – U.S.	167,659	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
SERC	4,904	4,656	4,759	7,228	6,719	5,365	4,759	3,594	3,555	2,282	2,311
SPP	385,688	379,089	343,178	344,012	351,672	369,385	367,960	365,754	344,469	350,033	351,171
WSCC – U.S.	199,906	413,762	317,348	296,272	275,616	261,011	257,271	247,138	203,478	208,337	176,197
NERC – U.S.	969,084	1,156,341	1,012,250	911,019	884,379	886,274	881,112	855,421	792,101	799,580	746,898
MAPP – CANADA	5,900	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	224	0	0	0	0	0	0	32,585	32,585	32,585	32,585
NERC – CANADA	6,124	6,000	6,000	6,000	6,000	6,000	6,000	38,585	38,585	38,585	38,585

Interruptible[1] Natural Gas – Steam (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	645	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	168	1,168	751	709	737	1,002	709	960	1,335	779	1,113
WUM	2,873	5,139	822	119	124	197	277	405	23	22	22
MAIN	3,686	6,307	1,573	828	861	1,199	986	1,365	1,358	801	1,135
NEW YORK	153,899	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
NEW ENGLAND [9]	13,760	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	167,659	95,517	85,120	10,575	10,047	8,650	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	2,344	1,310	2,351	3,326	3,322	2,254	3,235	2,287	2,243	1,241	1.250
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	2,560	3,346	2,408	3,902	3,397	3,111	1,524	1,307	1,312	1,041	1,061
SERC	4,904	4,656	4,759	7,228	6,719	5,365	4,759	3,594	3.555	2,282	2,311
GROUP A	313,629	317,120	272,176	271,413	283,843	295,286	292,597	302,420	279,936	282,054	281,957
GROUP B	47,573	43,812	56,294	52,923	48,948	54,267	59,395	45,667	44,602	44,845	45,046
GROUP C	24,496	18,157	14,708	19,676	18,881	19,832	15,968	17,667	19,931	23,134	24,168
SPP	385,688	379,089	343,178	344,012	351,672	369,385	367,960	365,754	344,469	350,033	351,171
NWPP – U.S.	2,026	40	431	443	443	443	486	1,046	1,313	1,408	1,453
RMPA	1,817	0	0	0	0	0	0	0	0	0	0
AZ-NM	950	867	1,394	0	0	0	0	0	0	0	0
CA-SNV	195,113	412,855	315,523	295,829	275,173	260,568	256,785	246,092	202.165	206,929	174,744
WSCC – U.S.	199,906	413,762	317,348	296,272	275,616	261,011	257,271	247,138	203,478	208,337	176,197

continued

Interruptible Natural Gas – Combustion Turbine (1000 MCF)

Regional Table 19

REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	2,323	2,955	5,321	7,215	8,732	9,947	10,920	11,699	12,322	12,822	13,222
ERCOT	0	18	18	18	18	18	0	0	0	0	0
MAAC	10,916	5,887	2,694	1,753	1,688	1,436	1,733	1,255	1,114	1,300	1,832
MAIN	419	1,594	1,269	432	534	567	628	716	968	1,006	1,439
MAPP – U.S.	142	475	400	431	449	559	530	550	573	596	620
NPCC – U.S.	235	0	0	0	0	0	0	0	0	0	0
SERC	1,517	1,223	1,740	1,624	2,460	2,208	2,765	2,930	2,619	6,293	3,003
SPP	576	1,536	1,606	1,710	2,131	2,056	2,273	2,306	2,639	2,707	2,844
WSCC – U.S.	668	2,318	5,495	4,415	4,749	4,740	6,316	6,001	5,923	5,891	5,484
NERC – U.S.	16,796	16,006	18,543	17,598	20,761	21,531	25,165	25,457	26,158	30,615	28,444
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	72	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	72	0	0	0	0	0	0	0	0	0	0

Interruptible Natural Gas – Combustion Turbine (1000 MCF)

Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	35	887	476	279	394	378	394	411	558	476	706
WUM	384	707	793	153	140	189	234	305	410	530	733
MAIN	419	1,594	1,269	432	534	567	628	716	968	1,006	1,439
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND	235	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	235	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	1,047	1,085	1,092	1,096	1,099	1,068	1,074	1,075	1,070	2,075	2,078
TVA[h]	1	—	—	—	—	—	—	—	—	—	—
VACAR	469	138	648	528	1,361	1,140	1,691	1,855	1,549	4,218	925
SERC	1,517	1,223	1,740	1,624	2,460	2,208	2,765	2,930	2,619	6,293	3,003
GROUP A	0	0	0	0	0	0	0	0	0	0	0
GROUP B	1	0	0	0	0	0	0	0	0	0	0
GROUP C	575	1,536	1,606	1,710	2,131	2,056	2,273	2,306	2,639	2,707	2,844
SPP	576	1,536	1,606	1,710	2,131	2,056	2,273	2,306	2,639	2,707	2,844
NWPP – U.S.	98	0	812	826	826	826	2,451	2,451	2,451	2,451	2,451
RMPA	0	384	332	1,014	1,243	1,129	1,105	794	835	766	327
AZ-NM	215	0	1,557	0	0	0	0	0	0	0	0
CA-SNV	355	1,934	2,794	2,575	2,680	2,785	2,760	2,756	2,637	2,674	2,706
WSCC – U.S.	668	2,318	5,495	4,415	4,749	4,740	6,316	6,001	5,923	5,891	5,484

Interruptible Natural Gas – Combined Cycle (1000 MCF) Regional Table 19

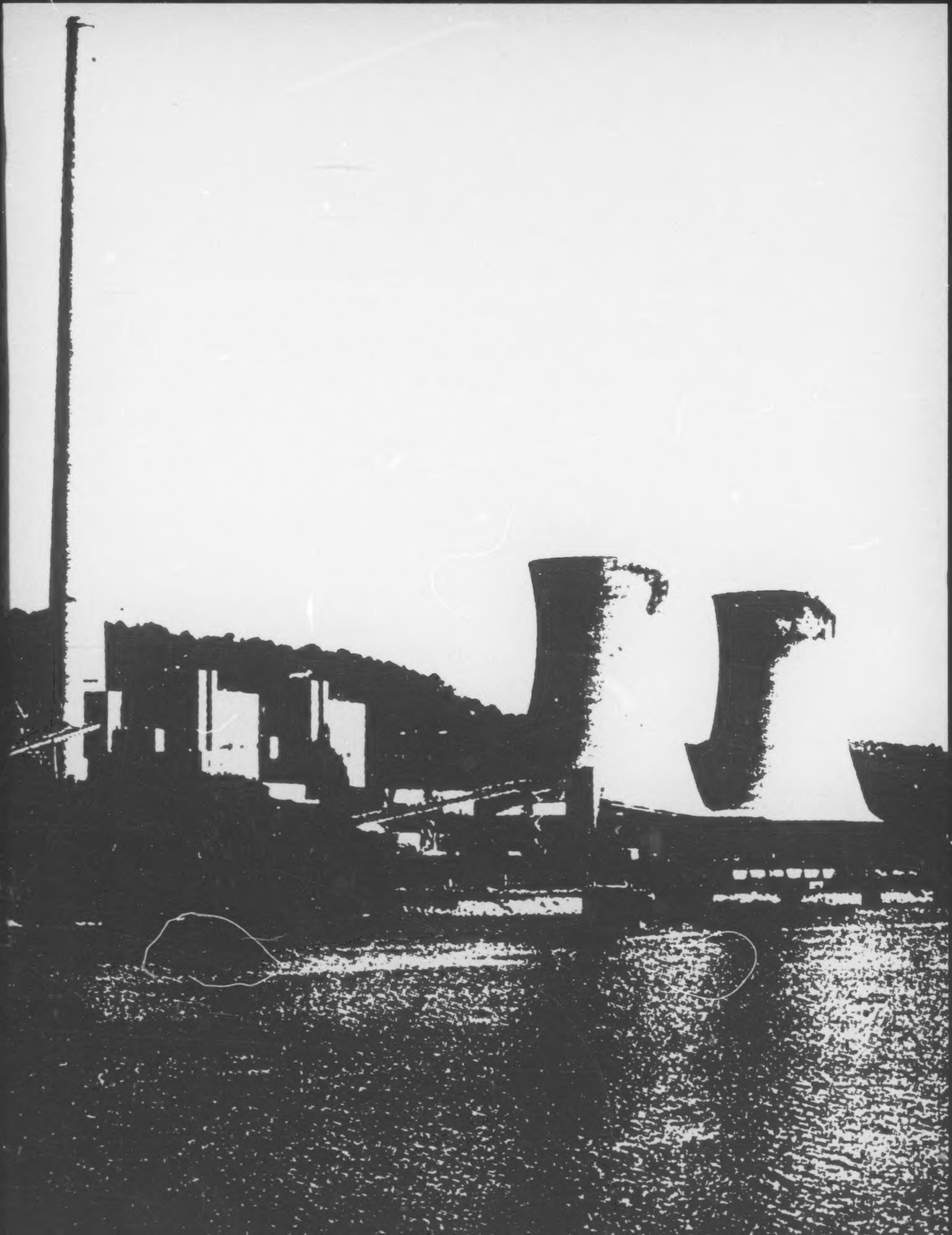
REGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ECAR	0	0	0	0	0	0	0	0	0	0	0
ERCOT	7,027	6,791	7,838	7,952	7,781	6,840	6,892	7,785	7,807	7,709	7,799
MAAC	4,661	8,714	5,761	4,421	3,902	3,086	3,052	2,584	2,051	2,457	6
MAIN	0	0	0	0	0	0	0	0	0	0	0
MAPP – U.S.	66	3	2	0	0	0	0	0	0	7	42
NPCC – U.S.	2,352	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
SPP	16,106	5,132	6,155	7,220	4,289	4,396	4,467	4,481	4,431	4,428	4,292
WSCC – U.S.	1,247	5,363	10,072	10,059	10,238	9,931	9,752	13,017	12,632	12,552	12,520
NERC – U.S.	31,459	26,003	29,828	29,652	26,210	24,253	24,163	27,867	26,921	27,153	24,659
MAPP – CANADA	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
WSCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
NERC – CANADA	0	0	0	0	0	0	0	0	0	0	0

Interruptible Natural Gas – Combined Cycle (1000 MCF) Subregional Table 19

SUBREGION	ACTUAL 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CMNWLTH ED.	0	0	0	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	0	0	0	0	0	0	0	0	0	0
WUM	0	0	0	0	0	0	0	0	0	0	0
MAIN	0	0	0	0	0	0	0	0	0	0	0
NEW YORK	0	0	0	0	0	0	0	0	0	0	0
NEW ENGLAND[9]	2,352	0	0	0	0	0	0	0	0	0	0
NPCC – U.S.	2,352	0	0	0	0	0	0	0	0	0	0
NEW BRUNSWICK	0	0	0	0	0	0	0	0	0	0	0
ONTARIO	0	0	0	0	0	0	0	0	0	0	0
QUÉBEC	0	0	0	0	0	0	0	0	0	0	0
NPCC – CANADA	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	0	0	0	0	0	0	0
SOUTHERN	0	0	0	0	0	0	0	0	0	0	0
TVA	0	0	0	0	0	0	0	0	0	0	0
VACAR	0	0	0	0	0	0	0	0	0	0	0
SERC	0	0	0	0	0	0	0	0	0	0	0
GROUP A	16,000	5,000	6,000	7,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
GROUP B	0	0	0	0	0	0	0	0	0	0	0
GROUP C	106	132	155	220	289	396	467	481	431	428	292
SPP	16,106	5,132	6,155	7,220	4,289	4,396	4,467	4,481	4,431	4,428	4,292
NWPP – U.S.	25	570	3,711	3,696	3,696	3,696	3,696	7,215	7,215	7,215	6,976
RMPA	0	0	0	0	0	0	0	0	0	0	0
AZ-NM	0	0	0	0	0	0	0	0	0	0	0
CA-SNV	1,222	4,793	6,361	6,363	6,542	6,235	6,056	5,802	5,417	5,337	5,544
WSCC – U.S.	1,247	5,363	10,072	10,059	10,238	9,931	9,752	13,017	12,632	12,552	12,520

FOOTNOTES TO TABLES 17-19

a/ Coal mined west of the Mississippi River.
b/ Coal sources indeterminate for ECAR.
c/ Distillate oil includes #1 and #2 oil, kerosene and jet fuel. This category includes amounts used at coal-burning plants for startup and flame stabilization.
d/ ECAR includes approximately 1,000,000 barrels for light-off and flame stabilization.
e/ Includes diesel.
f/ Residual oil includes #4, #5, #6 oil.
g/ Natural gas in New England is burned on an as available, interruptible basis. No firm contracts are anticipated in the future.
h/ Natural gas is used when available in 30% of TVA combustion turbine capacity. TVA does not have any firm long-term contracts, and thus cannot make accurate estimates of future use.
i/ Interruptible Natural Gas: by contractual agreement.
j/ ECAR includes approximately 5,000,000 MCF for flame stabilization and startup.



Planned Additions of Generating Units

All Units by Region

The generating unit additions planned for 1983-1992 are presented for the NERC regions and subregions in the following tables. These units are listed as reported by the Regional Reliability Councils of NERC to the U.S. Department of Energy in their April 1, 1983 (EP-411) Reports.

The principal fuel types of the new generating capacity planned to be brought into service in the next ten years are coal and nuclear. The following tables show that in the years 1983-1992 utilities are planning to add 129 new coal-fired units and 60 new nuclear units. Last year's projection for the 1982-1991 period was for 174 new coal-fired units and 61 new nuclear units. These reductions reflect the declining growth of peak demands expected by utilities.

A table listing only planned coal units, and a table listing only planned nuclear units, arranged chronologically by expected service date, are provided as Tables 21 and 22, respectively. A table listing only planned generating units by renewable energy sources is provided as Table 23.

The codes used throughout these tables for unit/fuel type and construction status are listed below. State locations of units are denoted by their two character federal postal codes. Generating units which are jointly owned are denoted with a "J" in the far right-hand column. In such cases, only the name of the majority utility owner is listed, along with the total summer megawatt generating capability of the unit. Utility system abbreviations follow the conventions used in the regional EP-411 Reports.

Symbol Codes for the Following Regional Tables

UNIT TYPE

ST	STEAM TURBINE-NON NUCLEAR
NB	STEAM-BWR NUCLEAR
NP	STEAM-PWR NUCLEAR
NH	STEAM-HTGR NUCLEAR
CD	CANDU
IC	INTERNAL COMBUSTION
GT	COMBUSTION TURBINE
HY	CONVENTIONAL HYDRO
PS	PUMPED STORAGE HYDRO
CW	COMBINED CYCLE-STEAM PORTION-WASTE HEAT ONLY
CA	COMBINED CYCLE-STEAM PORTION-AUXILIARY FIRED
CT	COMBINED CYCLE-COMBUSTION TURBINE PORTION
CG	COGENERATION
JE	JET ENGINE
FC	FUEL CELL
SO	SOLAR
WM	WIND POWER
GE	GEOTHERMAL
ZZ	NONE OF THE ABOVE
UN	UNKNOWN AT THIS TIME

CONSTRUCTION STATUS

P	PLANNED FOR INSTALLATION, BUT NOT UTILITY AUTHORIZED
L	REGULATORY APPROVAL PENDING
T	REGULATORY APPROVAL RECEIVED, BUT NOT UNDER CONSTRUCTION
U	UNDER CONSTRUCTION, LESS THAN APPROXIMATELY 50% OF PLANT COMPLETED
V	UNDER CONSTRUCTION, GREATER THAN APPROXIMATELY 50% OF PLANT COMPLETED

FUEL TYPE

WH	WASTE HEAT
COL	COAL - GENERAL
BIT	BITUMINOUS COAL
SUB	SUB-BITUMINOUS COAL
ANT	ANTHRACITE COAL
LIG	LIGNITE COAL
PC	PETROLEUM COKE
LNG	LIQUIFIED NATURAL GAS
MTH	METHANOL
GAS	GAS - GENERAL
NG	NATURAL GAS
RG	REFINERY GAS
BFG	BLAST FURNACE GAS
COG	COKE OVEN GAS
UNK	UNKNOWN AT THIS TIME
GST	GEOTHERMAL STEAM
MUL	MULTI-FUELED
REF	REFUSE - SOLID WASTE
OIL	OIL - GENERAL
FO1	NO.1 FUEL OIL
FO2	NO.2 FUEL OIL
FO4	NO.4 FUEL OIL
FO5	NO.5 FUEL OIL
FO6	NO.6 FUEL OIL
CRU	CRUDE OIL
TOP	TOP CRUDE OIL
JF	JET FUEL
KER	KEROSENE
LPG	LIQUID PROPANE GAS
RRO	RE-REFINED MOTOR OIL
SNG	SYNTHETIC NATURAL GAS
UR	URANIUM
PL	PLUTONIUM
WAT	WATER
TH	THORIUM
SUN	SUN
WND	WIND
G/C	GAS AND/OR COAL
O/C	OIL AND/OR COAL
W/G	WOOD AND/OR GAS
W/O	WOOD AND/OR OIL
WOD	WOOD
WD	WOOD AND WOOD WASTE
PEA	PEAT
ZZ	NONE OF THE ABOVE

NPCC
MAPP
WSCC
MAAC
ECAR
SPP
SERC
ERCOT
MICHIGAN
PENNSYLVANIA
INDIANA
OHIO
MD
WEST VIRGINIA
VIRGINIA
KENTUCKY

East Central Area Reliability Coordination Agreement Unit Additions Planned for 1983-1992

Table 20

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
ECAR	OH	CG&E	ZIMMER 1	NB	792	UR	**/**	V	J
ECAR	IN	NIPS	SCHAHFER 17	ST	344	COL	06/83	V	
ECAR	MI	GHLP	UNIT 3	ST	58	COL	06/83	V	
ECAR	IN	HE	MEROM 1	ST	460	COL	07/83	V	
ECAR	MI	DECO	ENRICO FERMI 2	NB	1093	UR	11/83	V	J
ECAR	MI	CP	MIDLAND 2	NP	786	UR	12/83	V	
ECAR	OH	CAPC	PERRY 1	NB	1179	UR	05/84	V	J
ECAR	MI	DECO	BELLE RIVER 1	ST	655	COL	07/84	V	J
ECAR	MI	CP	MIDLAND 1	NP	520	UR	07/84	V	
ECAR	KY	BREC	WILSON 1	ST	395	COL	07/84	V	
ECAR	KY	KU	GHENT 4	ST	500	COL	10/84	U	
ECAR	IN	AEP	ROCKPORT 1	ST	1300	COL	12/84	V	
ECAR	IN	SIGE	BROWN 2	ST	250	COL	01/85	U	
ECAR	MI	DECO	BELLE RIVER 2	ST	655	COL	07/85	U	
ECAR	IN	IP&L	PETERSBURG 4	ST	515	COL	04/86	U	
ECAR	PA	CAPC	BEAVER VALLEY 2	NP	820	UR	05/86	V	J
ECAR	IN	NIPS	SCHAHFER 18	ST	344	COL	06/86	U	
ECAR	IN	PSI	MARBLE HILL 1	NP	1130	UR	12/86	U	J
ECAR	IN	AEP	ROCKPORT 2	ST	1300	COL	12/86	U	
ECAR	KY	LG&E	TIMBLE COUNTY 1	ST	495	COL	06/87	U	
ECAR	OH	CAPC	PERRY 2	NB	1179	UR	05/88	V	J
ECAR	IN	PSI	MARBLE HILL 2	NP	1130	UR	06/88	U	J
ECAR	KY	CG&E	EAST BEND 1	ST	600	COL	04/90	U	
ECAR	IN	SIGE	BROWN [illegible]	ST	500	COL	01/91	P	
ECAR	KY	LG&E	UNDESIGNATED	GT	75	F02	06/91	P	
ECAR	**	APS	COAL 1	ST	630	COL	09/91	P	
ECAR	IN	IP&L	PATRIOT 1	ST	650	COL	10/92	L	
ECAR	KY	EKPC	SMITH 1	ST	600	COL	10/92	U	

/ Date indeterminate: NRC suspension.
** Indeterminate state location.

Electric Reliability Council of Texas Unit Additions Planned for 1983-1992

Table 20

NPCC
MAPP
WSCC
ECAR
MAAC
MAIN
SPP
SERC
TEXAS

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
ERCOT	TX	HL&P	DEEPWATER	CT	110	NG	06/83	P	
ERCOT	TX	TMPP	GIBBONS CREEK 1	ST	400	LIG	09/83	V	
ERCOT	TX	WETU	FORT STOCKTON	GT	5	NG	S*/83	V	
ERCOT	TX	TUCS	COMANCHE PEAK 1	NP	1150	UR	06/84	V	J
ERCOT	TX	TUCS	COMANCHE PEAK 2	NP	1150	UR	12/85	V	J
ERCOT	TX	HL&P	LIMESTONE 1	ST	720	LIG	03/86	U	
ERCOT	TX	AUST	HYDRO 1	HY	3	WAT	12/86	L	
ERCOT	TX	WETU	OKLAUNION 1[a]	ST	640	COL	12/86	U	J
ERCOT	TX	HL&P	SOUTH TEXAS PROJECT 1	NP	1250	UR	02/87	V	J
ERCOT	TX	HL&P	LIMESTONE 2	ST	720	LIG	03/87	U	
ERCOT	TX	AUST	REFUSE 1	ST	25	WH	06/87	V	
ERCOT	TX	TUCS	TWIN OAK 1	ST	562	LIG	02/88	U	
ERCOT	TX	CPSA	UNDETERMINED 1	ST	25	REF	02/88	P	
ERCOT	TX	LCRA	F.P.P. 3	ST	400	LIG	06/88	T	J
ERCOT	TX	CP&L	COLETO CREEK 2	ST	640	COL	12/88	L	J
ERCOT	TX	TUCS	FOREST GROVE 1	ST	750	LIG	01/89	U	J
ERCOT	TX	HL&P	SOUTH TEXAS PROJECT 2	NP	1250	UR	02/89	U	J
ERCOT	TX	HL&P	MALAKOFF 1	ST	615	LIG	03/89	P	
ERCOT	TX	HL&P	MALAKOFF 2	ST	615	LIG	03/89	P	
ERCOT	TX	LCRA	F.P.P. 4	ST	400	LIG	06/89	P	
ERCOT	TX	TMPP	UNDETERMINED 1	ST	600	LIG	06/89	P	
ERCOT	TX	ST&M	SAN MIGUEL 2	ST	200	LIG	01/90	P	
ERCOT	TX	TP&L	TWIN OAK 2	ST	563	LIG	02/90	U	
ERCOT	TX	CP&L	WALKER A 1	ST	640	LIG	12/90	P	J
ERCOT	TX	TUCS	MARTIN LAKE 4	ST	750	LIG	01/91	U	
ERCOT	TX	HL&P	UNDETERMINED	ST	600	UNK	03/91	P	
ERCOT	TX	TUCS	UNDETERMINED	ST	600	UNK	S*/91	X[b]	J
ERCOT	TX	TUCS	UNDETERMINED	ST	650	COL	01/92	P	J
ERCOT	TX	HL&P	UNDETERMINED	ST	600	UNK	03/92	P	
ERCOT	TX	CP&L	COAL 1	ST	640	COL	12/92	P	J
ERCOT	TX	TUCS	UNDETERMINED	ST	1000	UNK	S*/92	X[b]	J
ERCOT	TX	LCRA	UNDETERMINED	ST	600	LIG	S*/92	P	
ERCOT	TX	TESC	UNDETERMINED	UH	650	UNK	W*/92	P	
ERCOT	TX	TESC	UNDETERMINED	UH	650	UNK	W*/92	P	

a/ 175 MW of 640 MW Oklaunion capacity to participants in SPP Region.

b/ This additional capacity may be realized by rescheduling of units under construction or planned, by load reduction management and conservation, by deferral of unit retirements, and/or by capacity purchases.

S*/ Undetermined summer month.

W*/ Undetermined winter month.

WSCC
MAPP
NPCC
ECAR
MAIN
SPP
ERCOT
SERC
PENNSYLVANIA
NEW JERSEY
DEL
MD
MD

Mid-Atlantic Area Council Unit Additions Planned for 1983-1992

Table 20

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAAC	PA	PPL	SUSQUEHANNA 1	HB	1050	UR	05/83	V	J
MAAC	MD	BGE	BRANDON SHORES 1	ST	620	BIT	05/84	V	
MAAC	PA	PPL	SUSQUEHANNA 2	HB	1050	UR	11/84	V	J
MAAC	MD	BGE	N.E. WASTE	ST	47	REF	02/85	U	
MAAC	PA	BGE	SAFE HARBOR 9	HY	38	WAT	02/85	U	J
MAAC	PA	PECO	LIMERICK 1	HB	1055	UR	04/85	V	
MAAC	PA	BGE	SAFE HARBOR 11	HY	38	WAT	05/85	U	J
MAAC	PA	BGE	SAFE HARBOR 10	HY	36	WAT	08/85	U	J
MAAC	PA	BGE	SAFE HARBOR 12	HY	36	WAT	11/85	U	J
MAAC	PA	BGE	SAFE HARBOR 8	HY	38	WAT	02/86	U	J
MAAC	NJ	PSEG	HOPE CREEK 1	HB	1067	UR	12/86	V	J
MAAC	PA	GPU	RAYSTOWN 1,2,3	HY	1	WAT	12/87	L	J
MAAC	PA	PECO	LIMERICK 2	HB	1055	UR	10/88	U	
MAAC	MD	BGE	BRANDON SHORES 2	ST	620	BIT	12/88	U	
MAAC	DE	DPL	UNIDENTIFIED CT'S	GT	37	FO2	01/90	P	
MAAC	DE	DPL	UNIDENTIFIED CT'S	GT	42	FO2	01/92	P	

Mid-America Interpool Network
Unit Additions Planned for 1983-1992

Table 20

WSCC
MAPP
NPCC
MAAC
ECAR
SPP
SERC
ERCOT
MICHIGAN
WISCONSIN
ILLINOIS
MISSOURI

Commonwealth Edison Group

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAIN/CE	IL	CECO	LASALLE COUNTY 1	NB	1040	UR	05/83	V	
MAIN/CE	IL	CECO	LASALLE COUNTY 2	NB	1040	UR	12/83	V	
MAIN/CE	IL	CECO	BYRON 1	NP	1120	UR	02/84	V	
MAIN/CE	IL	CECO	BYRON 2	NP	1120	UR	08/85	V	
MAIN/CE	IL	CECO	BRAIDWOOD 1	NP	1090	UR	10/85	V	
MAIN/CE	IL	CECO	BRAIDWOOD 2	NP	1090	UR	10/86	V	

East Missouri Group

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAIN/E MO	MO	UES	CALLAWAY 1	NP	1120	UR	01/85	V	

South Central Illinois Group

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAIN/SCILL	IL	IP	CLINTON 1	NB	950	UR	08/84	V	J
MAIN/SCILL	IL	WIPC	UNDESIGNATED	GT	24	F02	12/90	P	
MAIN/SCILL	IL	CWLP	UNKNOWN 1	GT	36	F02	06/91	P	

Wisconsin-Upper Michigan Group

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAIN/WUM	WI	WPS	HAT RAPIDS 2	HY	0	WAT	08/83	T	
MAIN/WUM	WI	WPS	HAT RAPIDS 3	HY	0	WAT	08/83	T	
MAIN/WUM	WI	WPS	MERRILL 3	HY	1	WAT	01/84	T	
MAIN/WUM	WI	WEP	PLEASANT PRAIRIE 2	ST	580	SUB	10/84	V	
MAIN/WUM	WI	MPU	MANITOWOC 1	IC	5	OIL	01/85	L	
MAIN/WUM	WI	MPU	MANITOWOC 2	IC	5	OIL	01/85	L	
MAIN/WUM	WI	WEP	SMALL UNITS	UN	12	UN	01/85	P	
MAIN/WUM	WI	WPL	EDGEWATER 5	ST	380	SUB	03/85	U	J
MAIN/WUM	WI	WPL	NEW CO-GEN. 1	UN	5	UN	12/85	P	
MAIN/WUM	WI	WPL	NEW HYDRO 1	HY	1	WAT	12/85	P	
MAIN/WUM	WI	WEP	SMALL UNITS	UN	8	UN	01/86	P	
MAIN/WUM	WI	WPS	CO-GENERATION PLANT	ST	10	COL	12/86	P	
MAIN/WUM	WI	WEP	SMALL UNITS	UN	10	UN	01/87	P	
MAIN/WUM	WI	WEP	SMALL UNITS	UN	10	UN	01/88	P	
MAIN/WUM	WI	WPL	NEW HYDRO 2	HY	1	WAT	12/88	P	
MAIN/WUM	WI	MGE	UNKNOWN	UN	1	UN	12/88	P	
MAIN/WUM	WI	WEP	SMALL UNITS	UN	10	UN	01/89	P	
MAIN/WUM	WI	WPL	NEW CO-GEN. 2	UN	5	UN	12/89	P	
MAIN/WUM	WI	WPS	HYDRO	HY	1	WAT	12/90	P	
MAIN/WUM	WI	WPS	WOOD PLANT	ST	10	WD	12/90	P	
MAIN/WUM	WI	WEP	SMALL UNITS	UN	1	UN	01/91	P	
MAIN/WUM	WI	WPL	NEW CO-GEN. 3	UN	5	UN	12/91	P	
MAIN/WUM	WI	MGE	UNKNOWN	UN	1	UN	12/92	P	

Mid-continent Area Power Pool
Unit Additions Planned for 1983-1992

Table 20

NPCC
MAAC
WSCC
ECAR
MAIN
SPP
SERC
ERCOT
MANITOBA
SASKAT-CHEWAN
MICHIGAN
NORTH DAKOTA
SOUTH DAKOTA
MONTANA
MIN
WISCONSIN
NEBRASKA
IOWA

MAPP – U.S.

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAPP-U.S.	IA	MPW	MUSCATINE 9	ST	150	BIT	04/83	V	
MAPP-U.S.	WI	NSP	LADYSMITH 3	HY	1	WAT	07/83	U	
MAPP-U.S.	IA	IIGE	LOUISA 1	ST	650	SUB	10/83	V	J
MAPP-U.S.	ND	BEPC	ANTELOPE VALLEY 1	ST	416	LIG	06/84	V	
MAPP-U.S.	NE	NPPD	KINGSLEY HYDRO 1	HY	30	WAT	05/85	U	
MAPP-U.S.	MN	NSP	RIVERSIDE 7	ST	13	COL	05/86	P	
MAPP-U.S.	ND	BEPC	ANTELOPE VALLEY 2	ST	416	LIG	06/86	U	J
MAPP-U.S.	MN	MPL	BLANCHARD 3	HY	6	WAT	11/86	P	
MAPP-U.S.	ND	MDU	WILLISTON GT 4	GT	26	NG	05/87	L	
MAPP-U.S.	MN	NSP	SHERBURNE CO. 3	ST	800	SUB	01/88	L	J
MAPP-U.S.	WI	NSP	JIM FALLS 4	HY	1	WAT	05/88	L	
MAPP-U.S.	ND	OTP	SPIRITWOOD 1	ST	125	LIG	09/88	P	
MAPP-U.S.	IA	IELP	GUTHRIE COUNTY 1	ST	650	COL	12/88	P	J
MAPP-U.S.	MN	UPA	FUTURE GT 1990 #1	GT	21	FO2	01/90	P	
MAPP-U.S.	MN	NSP	HENNEPIN ISLAND 6	HY	1	WAT	05/90	P	
MAPP-U.S.	MN	NSP	HENNEPIN ISLAND 7	HY	1	WAT	05/90	P	
MAPP-U.S.	ND	BEPC	ANTELOPE VALLEY 3	ST	500	LIG	11/90	L	J
MAPP-U.S.	MN	UPA	FUTURE GT 1991 #1	GT	21	FO2	01/91	P	
MAPP-U.S.	NE	NPPD	FOSSIL 3	ST	600	SUB	05/91	L	
MAPP-U.S.	MN	UPA	FUTURE GT 1992 #1	GT	21	FO2	01/92	P	
MAPP-U.S.	MN	UPA	FUTURE GT 1992 #2	GT	21	FO2	01/92	P	

MAPP – Canada

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAPP-CAN.	SA	SPC	POPLAR RIVER 1	ST	200	LIG	07/83	V	
MAPP-CAN.	SA	SPC	NIPAWIN 1	HY	84	WAT	10/85	U	
MAPP-CAN.	SA	SPC	NIPAWIN 2	HY	84	WAT	12/85	U	
MAPP-CAN.	SA	SPC	NIPAWIN 3	HY	84	WAT	03/86	U	
MAPP-CAN.	SA	SPC	FUTURE FOSSIL 1	ST	200	LIG	11/89	P	
MAPP-CAN.	SA	SPC	FUTURE FOSSIL 2	ST	200	LIG	12/90	P	
MAPP-CAN.	MB	MHEB	LIMESTONE 1	HY	120	WAT	11/92	L	
MAPP-CAN.	MB	MHEB	LIMESTONE 2	HY	120	WAT	12/92	L	

Northeast Power Coordinating Council
Unit Additions Planned for 1983-1992

Table 20

WSCC
MAPP
MAIN
ECAR
MAAC
SPP
SERC
ERCOT
ONTARIO
QUEBEC
NEW BRUNSWICK
VT
NH
ME
NEW YORK
MASS
RI
CONN

New York

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
NPCC/NY	NY	POAS	KENSICO	HY	3	WAT	06/83	L	
NPCC/NY	NY	LOIL	MITCHEL GARDENS 1&2	ST	32	REF	11/83	U	
NPCC/NY	NY	LOIL	SHOREHAM	NB	809	UR	01/84	V	
NPCC/NY	NY	NEYE	SOMERSET	ST	625	BIT	11/84	U	
NPCC/NY	NY	CEHG	HIGH FALLS	HY	2	WAT	02/85	P	
NPCC/NY	NY	COEN	PEEKSKILL REFUSE	ST	50	REF	05/85	P	
NPCC/NY	NY	POAS	PASNY NEW HYDRO	HY	2	WAT	06/85	P	
NPCC/NY	NY	POAS	PASNY NEW HYDRO	HY	9	WAT	09/85	P	
NPCC/NY	NY	POAS	PASNY NEW HYDRO	HY	2	WAT	02/86	P	
NPCC/NY	NY	POAS	PASNY NEW HYDRO	HY	15	WAT	09/86	P	
NPCC/NY	NY	NIMP	NINE MILE POINT 2	NB	1080	UR	11/86	U	J
NPCC/NY	NY	NIMP	SOUTH GLENS FALLS	HY	12	WAT	05/87	P	
NPCC/NY	NY	NIMP	TRENTON	HY	10	WAT	05/87	P	
NPCC/NY	NY	NIMP	OSWEGO FALLS WEST	HY	6	WAT	11/87	P	
NPCC/NY	NY	POAS	PASNY NEW HYDRO	HY	10	WAT	01/88	P	
NPCC/NY	NY	NIMP	HI DAM	HY	3	WAT	05/88	P	
NPCC/NY	NY	NIMP	FELTS MILLS	HY	11	WAT	11/88	P	
NPCC/NY	NY	NIMP	MINETTO	HY	2	WAT	11/88	P	
NPCC/NY	NY	NIMP	UNION	HY	3	WAT	11/88	P	
NPCC/NY	NY	POAS	PASNY WOOD	ST	20	WD	06/89	P	
NPCC/NY	NY	POAS	PRATTSVILLE	PS	1000	WAT	09/89	P	
NPCC/NY	NY	NIMP	VARICK	HY	5	WAT	11/89	P	
NPCC/NY	NY	POAS	ARTHUR KILL	ST	700	BIT	05/90	P	
NPCC/NY	NY	POAS	PASNY SOLID WASTE	ST	30	REF	06/90	P	
NPCC/NY	NY	NIMP	FULTON	HY	3	WAT	05/91	P	
NPCC/NY	NY	NIMP	HUDSON FALLS	HY	36	WAT	05/91	P	
NPCC/NY	NY	NIMP	MECHANICVILLE	HY	12	WAT	05/91	P	
NPCC/NY	NY	NIMP	SUGAR ISLAND	HY	2	WAT	11/91	P	
NPCC/NY	NY	NIMP	OSWEGATCHE	HY	1	WAT	05/92	P	

New England

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
NPCC/NE	ME	CEMP	BRUNSWICK 2 & 3	HY	7	WAT	04/83	V	
NPCC/NE	VT	VTGP	H. K. SAUNDERS	HY	1	WAT	04/83	V	
NPCC/NE	RI	EUAS	PAWTUCKET 2	HY	0	WAT	10/83	P	
NPCC/NE	VT	VTGP	BOLTON FALLS	HY	3	WAT	11/83	L	
NPCC/NE	NH	PSNH	EASTMEN FALLS 2	HY	4	WAT	11/83	U	
NPCC/NE	MA	NOEU	HADLEY FALLS 2	HY	15	WAT	11/83	U	
NPCC/NE	VT	VTGP	J. C. MCNEIL 1	ST	50	WOD	02/84	U	
NPCC/NE	VT	VTGP	BARNET	HY	1	WAT	05/84	L	
NPCC/NE	VT	VTGP	BLACK RIVER	HY	13	WAT	05/84	L	
NPCC/NE	VT	VTGP	CHASE MILLS	HY	5	WAT	07/84	L	
NPCC/NE	VT	VTGP	ENOSBURG FALLS	HY	0	WAT	11/84	P	
NPCC/NE	VT	VTGP	HIGHGATE FALLS	HY	2	WAT	11/84	P	
NPCC/NE	VT	VTGP	MISSISQUOI PROJECT	HY	1	WAT	11/84	L	
NPCC/NE	NH	PSNH	MURPHY DAM	HY	2	WAT	11/84	P	
NPCC/NE	VT	VTGP	NORTH HARTLAND	HY	2	WAT	11/84	T	
NPCC/NE	VT	VTGP	NORTH TROY	HY	0	WAT	11/84	P	
NPCC/NE	VT	VTGP	RUTLAND SOLID WASTE	ST	4	REF	11/84	T	
NPCC/NE	VT	VTGP	PROCTOR 5	HY	1	WAT	12/84	T	
NPCC/NE	NH	PSNH	SEABROOK 1	NP	1150	UR	12/84	V	J
NPCC/NE	ME	CEMP	HIRAM HYDRO	HY	9	WAT	04/85	T	
NPCC/NE	VT	VTGP	FROG HOLLOW	HY	1	WAT	09/85	L	
NPCC/NE	NH	PSNH	ERROL	HY	2	WAT	11/85	P	
NPCC/NE	ME	BAHE	PENOBSCOT RIVER 2	HY	4	WAT	11/85	P	
NPCC/NE	CT	NOEU	MILLSTONE 3	NP	1150	UR	05/86	V	J
NPCC/NE	ME	CEMP	UPPER & MIDDLE DAMS	HY	2	WAT	07/86	P	
NPCC/NE	ME	CEMP	CATARACT	HY	6	WAT	11/86	P	
NPCC/NE	ME	CEMP	BRASSUA	HY	4	WAT	04/87	P	
NPCC/NE	NH	PSNH	SEABROOK 2	NP	1150	UR	07/87	U	J
NPCC/NE	VT	VTGP	BELDEN	HY	1	WAT	11/87	P	
NPCC/NE	NH	BAHE	PENOBSCOT RIVER 3	HY	2	WAT	11/87	P	
NPCC/NE	NH	PSNH	PSNH SITE A	HY	4	WAT	11/87	P	
NPCC/NE	NH	PSNH	FRANKLIN	HY	2	WAT	11/88	P	
NPCC/NE	ME	CEMP	LEWISTON	HY	24	WAT	04/89	P	
NPCC/NE	ME	BAHE	PENOBSCOT RIVER 4	HY	11	WAT	11/89	P	
NPCC/NE	VT	VTGP	C. RUTLAND	HY	1	WAT	04/90	P	
NPCC/NE	VT	VTGP	HUNTINGTON FALLS	HY	2	WAT	04/90	P	
NPCC/NE	NH	PSNH	PSNH SITE B	HY	1	WAT	11/90	P	
NPCC/NE	ME	BAHE	PENOBSCOT RIVER 5	HY	7	WAT	11/92	P	

Northeast Power Coordinating Council
Unit Additions Planned for 1983-1992

Table 20

Ontario Hydro

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
NPCC/ONT	ON	ONHY	PICKERING COMB. TURBINES	GT	19	F02	05/83	V	
NPCC/ONT	ON	ONHY	PICKERING 5	CD	516	UR	07/83	V	
NPCC/ONT	ON	ONHY	BRUCE COMB. TURBINES	GT	25	F02	09/83	V	
NPCC/ONT	ON	ONHY	BRUCE 6	CD	781	UR	04/84	V	
NPCC/ONT	ON	ONHY	ATIKOKAN 1	ST	206	COL	10/84	V	
NPCC/ONT	ON	ONHY	PICKERING 6	CD	516	UR	10/84	V	
NPCC/ONT	ON	ONHY	BRUCE 5	CD	781	UR	01/85	V	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/85	P	
NPCC/ONT	ON	ONHY	PICKERING 7	CD	516	UR	03/85	V	
NPCC/ONT	ON	ONHY	PICKERING 8	CD	516	UR	08/85	V	
NPCC/ONT	ON	ONHY	DARLINGTON COMB. INCREASE	GT	36	F02	10/85	U	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/86	P	
NPCC/ONT	ON	ONHY	BRUCE 7	CD	781	UR	07/86	V	
NPCC/ONT	ON	ONHY	BRUCE 8	CD	781	UR	01/87	V	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/87	P	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/88	P	
NPCC/ONT	ON	ONHY	DARLINGTON 2	CD	881	UR	05/88	U	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/89	P	
NPCC/ONT	ON	ONHY	DARLINGTON 1	CD	881	UR	02/89	U	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/90	P	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/91	P	
NPCC/ONT	ON	ONHY	DARLINGTON 3	CD	881	UR	11/91	U	
NPCC/ONT	ON	ONHY	PARALLEL GENERATION	ZZ	33	UNK	01/92	P	
NPCC/ONT	ON	ONHY	DARLINGTON 4	CD	881	UR	08/92	U	

WSCC
MAPP
MAIN
ECAR
MAAC
SPP
SERC
ERCOT
ONTARIO
QUÉBEC
NEW BRUNSWICK
VT
NH
ME
NEW YORK
MASS
RI
CONN

Hydro-Québec

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
NPCC/QUE	QB	HYQB	CHAT FALLS 5	HY	97	WAT	04/83	V	
NPCC/QUE	QB	HYQB	CHAT FALLS 6	HY	97	WAT	04/83	V	
NPCC/QUE	QB	HYQB	CHAT FALLS 7	HY	97	WAT	04/83	V	
NPCC/QUE	QB	HYQB	CHAT FALLS 8	HY	97	WAT	04/83	V	
NPCC/QUE	QB	HYQB	LG-3 6	HY	192	WAT	04/83	V	
NPCC/QUE	QB	HYQB	LG-3 7	HY	192	WAT	06/83	V	
NPCC/QUE	QB	HYQB	LG-3 8	HY	192	WAT	07/83	V	
NPCC/QUE	QB	HYQB	LG-3 9	HY	192	WAT	09/83	V	
NPCC/QUE	QB	HYQB	GENTILLY 2	CD	637	UR	10/83	V	
NPCC/QUE	QB	HYQB	LG-3 10	HY	192	WAT	10/83	V	
NPCC/QUE	QB	HYQB	LG-3 11	HY	192	WAT	12/83	V	
NPCC/QUE	QB	HYQB	LG-3 12	HY	192	WAT	02/84	V	
NPCC/QUE	QB	HYQB	LG-4 1	HY	290	WAT	02/84	V	
NPCC/QUE	QB	HYQB	LG-4 2	HY	290	WAT	03/84	V	
NPCC/QUE	QB	HYQB	LG-4 3	HY	290	WAT	06/84	V	
NPCC/QUE	QB	HYQB	LG-4 4	HY	290	WAT	08/84	V	
NPCC/QUE	QB	HYQB	LG-4 5	HY	290	WAT	09/84	V	
NPCC/QUE	QB	HYQB	LG-4 6	HY	290	WAT	11/84	V	
NPCC/QUE	QB	HYQB	LG-4 7	HY	290	WAT	12/84	V	
NPCC/QUE	QB	HYQB	LG-4 8	HY	290	WAT	02/85	V	
NPCC/QUE	QB	HYQB	LG-4 9	HY	290	WAT	03/85	V	
NPCC/QUE	QB	HYQB	MANIC 5 P.A. 1	HY	245	WAT	08/90	U	
NPCC/QUE	QB	HYQB	MANIC 5 P.A. 2	HY	245	WAT	10/90	U	
NPCC/QUE	QB	HYQB	MANIC 5 P.A. 3	HY	245	WAT	08/91	U	
NPCC/QUE	QB	HYQB	MANIC 5 P.A. 4	HY	245	WAT	10/91	U	
NPCC/QUE	QB	HYQB	UNKNOWN	UN	400	UNK	10/91	P	
NPCC/QUE	QB	HYQB	DELANEY 1	PS	211	WAT	04/92	L	
NPCC/QUE	QB	HYQB	DELANEY 2	PS	211	WAT	06/92	L	
NPCC/QUE	QB	HYQB	DELANEY 3	PS	211	WAT	08/92	L	
NPCC/QUE	QB	HYQB	DELANEY 4	PS	211	WAT	10/92	L	

Southeastern Electric Reliability Council
Unit Additions Planned for 1983-1992

Table 20

WSCC
MAPP
NPCC
ECAR
MAAC
MAIN
SPP
ERCOT
KENTUCKY
VIRGINIA
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
ALABAMA
GEORGIA
MISSISSIPPI
FLORIDA

Florida Subregion

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SERC/FLA	FL	SEBM	AIRPORT 3	IC	20	F06	06/83	P	
SERC/FLA	FL	SECI	SEMINOLE 1	ST	600	BIT	06/83	V	
SERC/FLA	FL	FLPL	ST. LUCIE 2	NP	802	UR	06/83	V	J
SERC/FLA	FL	FLPC	CRYSTAL RIVER 5	ST	640	BIT	12/84	U	
SERC/FLA	FL	SECI	SEMINOLE 2	ST	600	BIT	01/85	U	
SERC/FLA	FL	TALL	JACKSON BLUFF 1	HY	4	WAT	03/85	L	
SERC/FLA	FL	TALL	JACKSON BLUFF 2	HY	4	WAT	03/85	L	
SERC/FLA	FL	TALL	JACKSON BLUFF 3	HY	3	WAT	03/85	L	
SERC/FLA	FL	TAEC	BIG BEND 4	ST	419	BIT	04/85	U	
SERC/FLA	FL	ORLA	STANTON 1	ST	415	BIT	02/87	L	J
SERC/FLA	FL	JACO	ST. JOHNS RIVER 1	ST	554	BIT	04/87	U	J
SERC/FLA	FL	TALL	UNKNOWN 1	ST	50	BIT	06/88	P	
SERC/FLA	FL	JACO	ST. JOHNS RIVER 2	ST	554	BIT	10/88	U	J
SERC/FLA	FL	SECI	PEAT 1	ST	100	PEA	01/89	P	
SERC/FLA	FL	SECI	TAYLOR 1	ST	600	BIT	06/89	L	
SERC/FLA	FL	SECI	TAYLOR 2	ST	600	BIT	06/91	L	
SERC/FLA	FL	TAEC	MACINNES 1	ST	425	BIT	04/92	P	

Southern Subregion

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SERC/SOU	AL	ALAP	HARRIS 1,2	HY	117	WAT	04/83	V	
SERC/SOU	GA	SEPA	HARTWELL 5	HY	40	WAT	08/83	V	
SERC/SOU	GA	GEPC	SCHERER 2	ST	808	BIT	02/84	V	J
SERC/SOU	GA	SEPA	RICHARD B. RUSSELL 1	HY	75	WAT	07/84	V	
SERC/SOU	GA	SEPA	RICHARD B. RUSSELL 3	HY	75	WAT	01/85	V	
SERC/SOU	AL	ALAP	MITCHELL 5-7	HY	141	WAT	04/85	U	
SERC/SOU	AL	ALAP	MILLER 2	ST	666	BIT	05/85	U	
SERC/SOU	GA	GEPC	BARTLETTS FERRY 5,6	HY	100	WAT	11/85	U	
SERC/SOU	GA	GEPC	SCHERER 3	ST	808	BIT	02/87	U	J
SERC/SOU	GA	GEPC	VOGTLE 1	NP	1150*	UR	03/87	V	J
SERC/SOU	GA	GEPC	ROCKY MOUNTAIN 1-3	PS	848	WAT	04/87	U	
SERC/SOU	GA	SEPC	RICHARD B. RUSSELL 5	PS	75	WAT	02/88	U	
SERC/SOU	AL	ALEC	1 UNIT	CT	50	F02	06/88	P	
SERC/SOU	GA	SEPC	RICHARD B. RUSSELL 7	PS	75	WAT	08/88	U	
SERC/SOU	GA	GEPC	VOGTLE 2	NP	1150*	UR	09/88	U	J
SERC/SOU	GA	GEPC	GOAT ROCK 7,8	HY	67	WAT	11/88	U	
SERC/SOU	GA	GEPC	SCHERER 4	ST	808	BIT	02/89	U	J
SERC/SOU	AL	ALAP	MILLER 3	ST	666	BIT	05/89	U	
SERC/SOU	AL	ALEC	1 UNIT	CT	30	F02	06/89	P	
SERC/SOU	AL	ALEC	1 UNIT	CT	30	F02	06/90	P	
SERC/SOU	AL	ALAP	MILLER 4	ST	666	BIT	05/91	U	
SERC/SOU	AL	ALEC	1 UNIT	CT	50	F02	06/91	P	
SERC/SOU	AL	ALEC	1 UNIT	ST	250	BIT	06/92	P	

* 75 MW of 1150 MW Vogtle unit capacity to participant in Florida Subregion.

Southeastern Electric Reliability Council Unit Additions Planned for 1983-1992

Table 20

NPCC
MAPP
WSCC
ECAR
MAAC
SERC
SPP
ERCOT
KENTUCKY
VIRGINIA
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
ALABAMA
GEORGIA
MISSISSIPPI
FLORIDA

Tennessee Valley Authority Subregion

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SERC/TVA	TN	TEVA	WATTS BAR 1	NP	1170	UR	11/84	V	
SERC/TVA	TN	TEVA	WATTS BAR 2	NP	1170	UR	12/85	V	
SERC/TVA	AL	TEVA	BELLEFONTE 1	NP	1177	UR	11/86	V	
SERC/TVA	AL	TEVA	BELLEFONTE 2	NP	1177	UR	11/87	V	

Virginia-Carolinas Subregion

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SERC/VACAR	GA	SEPA	HARTWELL 5	HY	40	WAT	08/83	V	
SERC/VACAR	SC	SOCG	SUMMER 1	NP	900	UR	10/83	V	J
SERC/VACAR	NC	DUPC	MCGUIRE 2	NP	1180	UR	03/84	V	
SERC/VACAR	SC	SOCA	ST. STEPHEN HYDRO UNIT 1	HY	28	WAT	03/84	U	
SERC/VACAR	SC	SOCA	ST. STEPHEN HYDRO UNIT 2	HY	28	WAT	03/84	U	
SERC/VACAR	SC	SOCA	ST. STEPHEN HYDRO UNIT 3	HY	28	WAT	03/84	U	
SERC/VACAR	SC	SOCA	CROSS SITE UNIT 2	ST	450	BIT	05/84	V	
SERC/VACAR	GA	SEPA	RICHARD B. RUSSELL 2	HY	75	WAT	10/84	U	
SERC/VACAR	GA	SEPA	RICHARD B. RUSSELL 4	HY	75	WAT	04/85	U	
SERC/VACAR	SC	DUPC	CATAWBA 1	NP	1145	UR	06/85	V	
SERC/VACAR	VA	VIEP	BATH COUNTY 1	PS	350	WAT	10/85	V	J
SERC/VACAR	VA	VIEP	BATH COUNTY 2	PS	350	WAT	10/85	V	J
SERC/VACAR	VA	VIEP	BATH COUNTY 4	PS	350	WAT	10/85	V	J
SERC/VACAR	NC	CAPO	HARRIS 1	NP	900	UR	03/86	V	
SERC/VACAR	VA	VIEP	BATH COUNTY 3	PS	350	WAT	10/86	V	J
SERC/VACAR	VA	VIEP	BATH COUNTY 5	PS	350	WAT	10/86	V	J
SERC/VACAR	VA	VIEP	BATH COUNTY 6	PS	350	WAT	10/86	V	J
SERC/VACAR	SC	DUPC	CATAWBA 2	NP	1145	UR	06/87	V	
SERC/VACAR	SC	SOCA	CROSS SITE UNIT 1	ST	450	BIT	05/88	L	
SERC/VACAR	GA	SEPA	RICHARD B. RUSSELL 6	PS	75	WAT	05/88	U	
SERC/VACAR	GA	SEPA	RICHARD B. RUSSELL 8	PS	75	WAT	11/88	U	
SERC/VACAR	NC	CAPO	HARRIS 2	NP	900	UR	03/90	U	
SERC/VACAR	SC	SOCG	UNDETERMINED	GT	50	FO2	05/90	P	
SERC/VACAR	SC	SOCA	PEE DEE UNIT 1	ST	450	BIT	05/91	L	
SERC/VACAR	SC	SOCG	UNDETERMINED	ST	500	COL	05/91	P	
SERC/VACAR	NC	CAPO	MAYO 2	ST	720	COL	03/92	U	

Southwest Power Pool
Unit Additions Planned for 1983-1992

Table 20

NPCC
MAPP
MAAC
WSCC
MAIN
ECAR
SERC
ERCOT
KANSAS
MISSOURI
OKLAHOMA
ARKANSAS
TEXAS
MISS
LOUISIANA
NEW MEXICO

Group A (West Arkansas – Louisiana – Mississippi Area)

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SPP/GRP A	LA	CAJN	BIG CAJUN 2, UNIT 3	ST	540	SUB	06/83	V	J
SPP/GRP A	MS	MSUI	GRAND GULF 1	NB	1250	UR	12/83	V	J
SPP/GRP A	LA	MSUI	WATERFORD 3	NP	1104	UR	01/84	V	
SPP/GRP A	AR	MSUI	INDEPENDENCE 2	ST	816	SUB	01/85	U	J
SPP/GRP A	LA	GUSU	RIVER BEND 1	NB	940	UR	12/85	V	J
SPP/GRP A	LA	CAJN	OXBOW 1	ST	540	LIG	05/88	L	
SPP/GRP A	MS	MSUI	GRAND GULF 2	NB	1250	UR	11/88	U	J
SPP/GRP A	LA	MSUI	WILTON 1	ST	800	COL	01/90	P	
SPP/GRP A	LA	MSUI	WILTON 2	ST	800	COL	01/92	P	

Group B (Oklahoma Area)

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SPP/GRP B	NM	SWPS	MADDOX 1	ST	110	GAS	09/83	P	
SPP/GRP B	OK	OKGE	MUSKOGEE 6	ST	515	SUB	11/84	V	
SPP/GRP B	TX	SOEP	PIRKEY 1	ST	640	LIG	02/85	U	J
SPP/GRP B	MO	SWPA	CLARENCE CANNON 1	PS	32	WAT	03/85	U	
SPP/GRP B	MO	SWPA	CLARENCE CANNON 2	HY	20	WAT	03/85	U	
SPP/GRP B	TX	SWPS	TOLK 2	ST	500	SUB	06/85	U	
SPP/GRP B	OK	GRRD	GRDA 2	ST	520	BIT	01/86	U	
SPP/GRP B	LA	SOEP	DOLET HILLS 1	ST	640	LIG	02/86	U	
SPP/GRP B	OK	OKGE	UNKNOWN	CT	300	F02	S*/89	P	
SPP/GRP B	TX	SWPS	SPS 6	ST	600	SUB	06/90	P	
SPP/GRP B	OK	OKGE	UNKNOWN	CT	200	F02	S*/90	P	
SPP/GRP B	OK	PSOK	INOLA 1	ST	640	SUB	12/91	P	J
SPP/GRP B	OK	OKGE	UNKNOWN	CT	200	F02	S*/91	P	
SPP/GRP B	TX	SWPS	SWPS 7	ST	600	SUB	06/92	P	
SPP/GRP B	OK	OKGE	UNKNOWN	ST	500	SUB	S*/92	P	

Group C (West Missouri – Kansas Area)

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
SPP/GRP C	KS	KAPL	JEFFREY 3	ST	600	SUB	06/83	V	J
SPP/GRP C	KS	SUNC	HOLCOMB 1	ST	200	COL	09/83	V	
SPP/GRP C	KS	KACE	WOLF CREEK 1	NP	1150	UR	04/85	V	J
SPP/GRP C	MO	MIPU	UNKNOWN	GT	44	NG	05/86	P	
SPP/GRP C	MO	EMDE	ASBURY 2	ST	20	BIT	06/86	P	
SPP/GRP C	MO	STJO	EDMOND ST.	ST	15	F06	04/88	P	
SPP/GRP C	MO	MIPU	GREENWOOD 1,2,3,4	GT	20	F02	05/88	P	
SPP/GRP C	MO	ASEC	UNDETERMINED	ST	630	BIT	06/88	P	
SPP/GRP C	MO	MIPU	UNKNOWN	ST	100	BIT	05/90	P	J
SPP/GRP C	MO	ASEC	UNDETERMINED	ST	630	BIT	06/91	P	
SPP/GRP C	MO	EMDE	UNKNOWN	ST	150	COL	06/92	P	J

S*/ Undetermined summer month.

Western Systems Coordinating Council
Unit Additions Planned for 1983-1992

Table 20

NPCC
MAPP
ECAR
MAIN
MAAC
SPP
SERC
ERCOT
BRITISH COLUMBIA
ALBERTA
WASHINGTON
MONTANA
SOUTH DAKOTA
OREGON
IDAHO
WYOMING
NEVADA
UTAH
COLORADO
CALIFORNIA
ARIZONA
NEW MEXICO
TEXAS

Northwest Power Pool Area

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/NWPP	WA	TCL	E.B.C. 4.6 1	HY	2	WAT	04/83	V	J
WSCC/NWPP	WA	TCL	P.E.C. 66.0 1	HY	2	WAT	04/83	V	J
WSCC/NWPP	WA	USPN	PUMP GEN. 10	PS	0	WAT	05/83	V	
WSCC/NWPP	UT	UPLC	HUNTER 3	ST	400	BIT	06/83	V	
WSCC/NWPP	WA	USPN	PUMP GEN. 11	PS	0	WAT	07/83	V	
WSCC/NWPP	ID	IPC	CASCADE	HY	10	WAT	09/83	U	
WSCC/NWPP	WA	USPN	PUMP GEN. 12	PS	0	WAT	09/83	V	
WSCC/NWPP	WA	PSPL	FREDONIA 1	GT	124	NG	11/83	U	
WSCC/NWPP	WA	PSPL	FREDONIA 2	GT	124	NG	11/83	U	
WSCC/NWPP	WA	WWPC	KETTLE FALLS	ST	42	WD	11/83	V	
WSCC/NWPP	ID	IPC	COGEN NO. 2	CG	15	UNK	01/84	P	
WSCC/NWPP	MT	MPC	COLSTRIP 3	ST	700	BIT	01/84	V	J
WSCC/NWPP	WA	BPA	WNP 2	NB	1100	UR	02/84	V	
WSCC/NWPP	UT	UPLC	MILFORD 1	GE	20	GST	04/84	U	
WSCC/NWPP	WA	GCPD	QUINCY CHUTE	HY	9	WAT	05/84	T	J
WSCC/NWPP	WA	TCL	MAIN CANAL HEADWORKS 1	HY	11	WAT	06/84	T	J
WSCC/NWPP	WA	TCL	MAIN CANAL HEADWORKS 2	HY	11	WAT	06/84	T	J
WSCC/NWPP	MT	USCE	LIBBY UNIT 5	HY	121	WAT	10/84	U	
WSCC/NWPP	UT	DGT	BONANZA 1	ST	400	BIT	12/84	U	
WSCC/NWPP	ID	IPC	COGEN NO. 3	CG	20	UNK	01/85	P	
WSCC/NWPP	WA	TCL	SUMMER FALLS 1	HY	47	WAT	05/85	U	J
WSCC/NWPP	WA	TCL	SUMMER FALLS 2	HY	47	WAT	05/85	U	J
WSCC/NWPP	NV	SPP	VALMY 2	ST	250	BIT	06/85	U	J
WSCC/NWPP	MT	MPC	COLSTRIP 4	ST	700	BIT	07/85	U	J
WSCC/NWPP	WA	SCL	BOUNDARY 55	HY	0	WAT	11/85	U	
WSCC/NWPP	WA	SCL	SOUTH FORK TOLT	HY	15	WAT	12/85	L	
WSCC/NWPP	ID	IPC	COGEN NO. 4	CG	10	UNK	01/86	P	
WSCC/NWPP	WA	SCL	BOUNDARY 56	HY	0	WAT	02/86	U	
WSCC/NWPP	WA	USCE	BONNEVILLE FW SITE 3	HY	2	WAT	09/86	T	
WSCC/NWPP	WA	USCE	BONNEVILLE FW SITE 4	HY	3	WAT	09/86	T	
WSCC/NWPP	WA	USCE	BONNEVILLE FW SITE 6	HY	3	WAT	09/86	T	
WSCC/NWPP	WA	SCL	ROSS 1-4	HY	79	WAT	12/86	L	
WSCC/NWPP	WA	BPA	WNP 3	NP	1240	UR	12/86	V	J
WSCC/NWPP	ID	IPC	COGEN NO. 5	CG	10	UNK	01/87	P	
WSCC/NWPP	ID	IPC	SWAN FALLS REBUILD	HY	13	WAT	01/87	L	
WSCC/NWPP	ID	IPC	COGEN NO. 6	CG	15	UNK	01/88	P	
WSCC/NWPP	OR	USCE	STRUBE UNIT 1	HY	5	WAT	06/88	T	
WSCC/NWPP	WA	USCE	THE DALLES N FISHWAY PH	HY	5	WAT	06/88	T	
WSCC/NWPP	OR	USCE	COUGAR UNIT 3	HY	40	WAT	07/88	T	
WSCC/NWPP	ID	IPC	COGEN NO. 7	CG	15	UNK	01/89	P	
WSCC/NWPP	OR	USCE	BLUE R LAKE PH UNIT 1	HY	10	WAT	06/89	P	
WSCC/NWPP	OR	USCE	BLUE R LAKE PH UNIT 2	HY	10	WAT	06/89	P	
WSCC/NWPP	WA	USCE	WYNOOCHEE UNIT 1	HY	2	WAT	10/89	P	
WSCC/NWPP	WA	USCE	WYNOOCHEE UNIT 2	HY	4	WAT	10/89	P	
WSCC/NWPP	WA	USCE	WYNOOCHEE UNIT 3	HY	4	WAT	10/89	P	
WSCC/NWPP	WY	PPL	WYODAK 2	ST	315	BIT	12/89	T	J
WSCC/NWPP	ID	IPC	COGEN NO. 8	CG	15	UNK	01/90	P	
WSCC/NWPP	OR	USCE	MCNARY 2ND PH 15	HY	129	WAT	08/90	P	
WSCC/NWPP	OR	USCE	MCNARY 2ND PH 16	HY	129	WAT	11/90	P	
WSCC/NWPP	ID	IPC	COGEN NO. 9	CG	15	UNK	01/91	P	
WSCC/NWPP	WA	PSPL	SKAGIT 1	NB	1275	UR	01/91	L	
WSCC/NWPP	OR	USCE	MCNARY 2ND PH 17	HY	129	WAT	02/91	P	
WSCC/NWPP	OR	USCE	MCNARY 2ND PH 18	HY	129	WAT	05/91	P	
WSCC/NWPP	WA	BPA	WNP 1	NP	1250	UR	06/91	V	J
WSCC/NWPP	WA	WWPC	CRESTON 1	ST	500	SUB	07/91	L	
WSCC/NWPP	OR	USCE	MCNARY 2ND PH 19	HY	129	WAT	08/91	P	
WSCC/NWPP	OR	USCE	MCNARY 2ND PH 20	HY	129	WAT	11/91	P	
WSCC/NWPP	ID	IPC	COGEN NO. 10	CG	15	UNK	01/92	P	
WSCC/NWPP	ID	IPC	LUCKY PEAK	HY	75	WAT	05/92	T	

Western Systems Coordinating Council Unit Additions Planned for 1983-1992

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Rocky Mountain Power Area

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/RMPA	CO	CUEA	CRAIG 3	ST	400	BIT	01/84	V	
WSCC/RMPA	CO	PRPA	RAWHIDE 1	ST	250	BIT	04/84	V	
WSCC/RMPA	CO	USLM	MOUNT ELBERT 2	PS	100	WAT	05/84	V	
WSCC/RMPA	CO	CUEA	TACOMA 4	HY	14	WAT	01/85	P	
WSCC/RMPA	CO	USUC	MCPHEE POWER PLANT	HY	1	WAT	11/86	P	
WSCC/RMPA	CO	PSC	PAWNEE 2	ST	405	BIT	05/89	L	
WSCC/RMPA	CO	USUC	TOWAOC	HY	11	WAT	05/89	P	
WSCC/RMPA	CO	USUC	RIDGEWAY POWER PLANT	HY	2	WAT	12/89	P	
WSCC/RMPA	CO	PSC	UNSITED COAL 1	ST	350	BIT	04/92	P	
WSCC/RMPA	CO	CCS	NIXON 2	ST	350	BIT	10/92	P	

Arizona-New Mexico Power Area

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/AZ-NM	AZ	APS	PALO VERDE 1	NP	1270	UR	02/84	V	J
WSCC/AZ-NM	CA	IID	DROP ! (3)	HY	5	WAT	06/84	U	
WSCC/AZ-NM	CA	IID	EAST HIGHLINE 1	HY	2	WAT	06/84	U	
WSCC/AZ-NM	NM	PEGT	ESCALANTE 1	ST	210	BIT	06/84	V	
WSCC/AZ-NM	AZ	APS	PALO VERDE 2	NP	1270	UR	02/85	V	J
WSCC/AZ-NM	AZ	TEP	SPRINGERVILLE 1	ST	350	SUB	06/85	U	
WSCC/AZ-NM	AZ	APS	PALO VERDE 3	NP	1270	UR	05/86	U	J
WSCC/AZ-NM	AZ	TEP	SPRINGERVILLE 2	ST	350	SUB	06/87	U	
WSCC/AZ-NM	AZ	AEPC	AEPCO 1	ST	275	SUB	01/90	P	J
WSCC/AZ-NM	AZ	SRP	CORONADO 3	ST	350	SUB	05/91	U	
WSCC/AZ-NM	TX	EPE	UNDETERMINED	ST	150	BIT	05/91	P	
WSCC/AZ-NM	AZ	APS	CHOLLA 5	ST	340	SUB	06/91	P	
WSCC/AZ-NM	AZ	TEP	SPRINGERVILLE 3	ST	350	SUD	06/91	T	
WSCC/AZ-NM	NM	PEGT	ESCALANTE 2	ST	210	BIT	10/91	P	
WSCC/AZ-NM	AZ	AEPC	AEPCO 2	ST	275	BIT	01/92	P	J
WSCC/AZ-NM	AZ	APS	FUMPED STORAGE 1	PS	150	WAT	06/92	P	

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California-Southern Nevada Power Area

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	PG&E	CANAL CREEK	HY	0	WAT	04/83	V	
WSCC/CA-SNV	CA	MWD	CORONA	HY	3	WAT	04/83	V	
WSCC/CA-SNV	CA	PG&E	FAIRFIELD MID	HY	0	WAT	04/83	V	
WSCC/CA-SNV	CA	PG&E	FIRST CHOWCHILLA	CG	10	NG	04/83	L	
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 8	CG	7	CRU	04/83	P	
WSCC/CA-SNV	CA	SCE	SAN ONOFRE 2	NP	1100	UR	04/83	V	J
WSCC/CA-SNV	CA	PG&E	SID MONTICELLO	HY	7	WAT	04/83	V	
WSCC/CA-SNV	CA	PG&E	SSJID FRANKENHEIMER	HY	0	WAT	04/83	V	
WSCC/CA-SNV	CA	PG&E	DIABLO CANYON 1	NP	1084	UR	05/83	V	
WSCC/CA-SNV	CA	PG&E	GEYSERS 18	GE	110	GST	05/83	V	
WSCC/CA-SNV	CA	PG&E	HELMS PUMPED STORAGE 1	PS	374	WAT	05/83	V	
WSCC/CA-SNV	CA	MID	STONE DROP	HY	1	WAT	05/83	V	
WSCC/CA-SNV	CA	PG&E	EBMUD PARDEE UNIT 3	HY	0	WAT	06/83	V	
WSCC/CA-SNV	CA	PG&E	HBMWD MATTHEWS DAM	HY	0	WAT	06/83	V	
WSCC/CA-SNV	CA	PG&E	HELMS PUMPED STORAGE 2	PS	374	WAT	06/83	V	
WSCC/CA-SNV	CA	PG&E	HELMS PUMPED STORAGE 3	PS	375	WAT	06/83	V	
WSCC/CA-SNV	CA	PG&E	IRON MNTN MINES 3	HY	1	WAT	06/83	L	
WSCC/CA-SNV	CA	PG&E	SLO SALINAS RES	HY	0	WAT	06/83	T	
WSCC/CA-SNV	CA	PG&E	US WIND PWR	WM	4	WND	06/83	T	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	7	GST	07/83	V	
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 9	CG	6	CRU	07/83	P	
WSCC/CA-SNV	CA	PG&E	SIMPSON PAPER CO	CG	0	NG	07/83	U	
WSCC/CA-SNV	CA	SCE	SMALL COGENERATION	CG	64	UNK	07/83	U	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	1	WAT	07/83	V	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	1	SUN	07/83	V	
WSCC/CA-SNV	CA	SCE	WIND	WM	4	WND	07/83	V	
WSCC/CA-SNV	CA	PG&E	CAMANCHE	HY	1	WAT	08/83	V	
WSCC/CA-SNV	CA	MWD	PERRIS 1	HY	8	WAT	08/83	V	
WSCC/CA-SNV	NV	NEVP	REID GARNDER 4	ST	250	BIT	08/83	V	J
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 4	CG	6	CRU	09/83	T	
WSCC/CA-SNV	CA	PG&E	PROJ B OAK FLAT	HY	1	WAT	09/83	L	
WSCC/CA-SNV	CA	SCE	SAN ONOFRE 3	NP	1100	UR	09/83	V	J
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	2	WAT	09/83	V	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	1	WAT	09/83	V	
WSCC/CA-SNV	CA	PG&E	KERCKHOFF 2	HY	151	WAT	10/83	V	
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 10	CG	6	CRU	10/83	P	
WSCC/CA-SNV	CA	PG&E	DIABLO CANYON 2	NP	1106	UR	11/83	V	
WSCC/CA-SNV	CA	PG&E	LOCKHEED SUNNYVALE	CG	50	NG	11/83	T	
WSCC/CA-SNV	CA	CDWR	PINE FLAT	HY	80	WAT	11/83	V	
WSCC/CA-SNV	CA	SMUD	GEOTHERMAL 1	GE	72	GST	12/83	V	
WSCC/CA-SNV	CA	PG&E	PAUL MASSON	CG	0	NG	12/83	V	
WSCC/CA-SNV	CA	PG&E	PROJ [illegible] SCOTT DAM	HY	1	WAT	12/83	L	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	15	SUN	12/83	V	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	1	WND	12/83	L	
WSCC/CA-SNV	CA	SMUD	SOLAR 1	SO	1	SUN	01/84	L	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ D	HY	1	WAT	02/84	L	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ E	HY	1	WAT	02/84	L	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ F	HY	0	WAT	02/84	L	
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 5	CG	6	CRU	03/84	P	
WSCC/CA-SNV	CA	MWD	RIO HONDO 1	HY	2	WAT	03/84	V	

Western Systems Coordinating Council Unit Additions Planned for 1983-1992

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REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	1	WAT	03/84	U	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	3	WAT	03/84	U	
WSCC/CA-SNV	CA	PG&E	PROJ A NEWCASTLE	HY	0	WAT	05/84	L	
WSCC/CA-SNV	CA	PG&E	PROJ C MC CLOUD	HY	2	WAT	05/84	P	
WSCC/CA-SNV	CA	CDWR	BOTTLE ROCK	GE	55	GST	06/84	U	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL 1	GE	5	GST	06/84	V	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL 2	GE	9	GST	06/84	V	
WSCC/CA-SNV	CA	PG&E	OXY GEOTHERMAL	GE	80	GST	06/84	U	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ I	HY	0	WAT	06/84	L	
WSCC/CA-SNV	CA	PG&E	WILD WELL GEO. PROJ	GE	5	GST	06/84	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	5	WND	06/84	L	
WSCC/CA-SNV	CA	PG&E	WOOD WASTE	CG	40	ZZ	06/84	L	
WSCC/CA-SNV	CA	MWD	COYOTE CR 1	HY	3	WAT	07/84	U	
WSCC/CA-SNV	CA	PG&E	OIL FIELD/REF COGEN	CG	100	CRU	07/84	P	
WSCC/CA-SNV	CA	SCE	SMALL COGENERATION	CG	47	UNK	07/84	U	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ K	HY	3	WAT	07/84	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	7	WND	07/84	U	
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 6	CG	6	CRU	09/84	P	
WSCC/CA-SNV	CA	PG&E	BIOMASS CPL	CG	50	ZZ	10/84	T	
WSCC/CA-SNV	CA	PG&E	OIL FIELD COGEN OED 11	CG	6	CRU	10/84	P	
WSCC/CA-SNV	CA	MWD	RED MOUNTAIN 1	HY	6	WAT	10/84	T	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL 1	GE	47	GST	11/84	U	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	5	WAT	12/84	U	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	3	SUN	12/84	U	
WSCC/CA-SNV	CA	PG&E	UNION OIL	CG	28	WH	12/84	U	
WSCC/CA-SNV	CA	MWD	VALLEY VIEW 1	HY	4	WAT	12/84	T	
WSCC/CA-SNV	CA	PG&E	CHAMBERS JACKASS DIV	HY	0	WAT	01/85	L	
WSCC/CA-SNV	CA	MID	GOODWIN DAM	HY	3	WAT	01/85	P	
WSCC/CA-SNV	CA	MID	MSR #1	GE	6	GST	01/85	P	
WSCC/CA-SNV	CA	SNCL	MSR #1	GE	4	GST	01/85	P	
WSCC/CA-SNV	CA	MID	NEW HOGAN	HY	2	WAT	01/85	T	
WSCC/CA-SNV	CA	SDGE	NILAND 1	GE	24	GST	01/85	P	
WSCC/CA-SNV	CA	PG&E	OTHER DIV/STOR INCREASE	HY	0	WAT	01/85	P	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ H	HY	2	WAT	01/85	P	
WSCC/CA-SNV	CA	SMUD	CAMP FAR WEST	HY	0	WAT	04/85	U	
WSCC/CA-SNV	CA	CDWR	ALAMO 1	HY	17	WAT	05/85	U	
WSCC/CA-SNV	CA	LDWP	COGENERATION	CG	30	UNK	06/85	P	
WSCC/CA-SNV	CA	PG&E	FPA FRIANT	HY	6	WAT	06/85	T	
WSCC/CA-SNV	CA	PG&E	GEYSERS 16	GE	110	GST	06/85	U	
WSCC/CA-SNV	CA	PG&E	MOSS LANDING GAS EXPANDER	CG	10	NG	06/85	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	8	WND	06/85	P	
WSCC/CA-SNV	CA	CDWR	CASTAIC OUTLET	HY	1	WAT	07/85	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	25	GST	07/85	U	
WSCC/CA-SNV	CA	PG&E	OIL FIELD/REF COGEN	CG	100	CRU	07/85	P	
WSCC/CA-SNV	CA	CDWR	PYRAMID OUTLET	HY	1	WAT	07/85	L	
WSCC/CA-SNV	CA	SCE	SMALL COGENERATION	CG	50	UNK	07/85	P	
WSCC/CA-SNV	CA	CDWR	SUTTER BUTTE	HY	2	WAT	07/85	L	
WSCC/CA-SNV	CA	SCE	WIND	WM	33	WND	07/85	P	
WSCC/CA-SNV	CA	NCPA	GEOTHERMAL PROJ. 3	GE	105	GST	09/85	L	
WSCC/CA-SNV	CA	CDWR	THERMALITO AFTERBAY	HY	13	WAT	09/85	U	

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REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	PG&E	SLD WSTE RECOVERY SF	CG	40	REF	10/85	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	5	WAT	12/85	U	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	3	WAT	12/85	U	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	3	SUN	12/85	U	
WSCC/CA-SNV	CA	SMUD	COMBUSTION TURBINE 1	GT	50	NG	01/86	L	
WSCC/CA-SNV	CA	SMUD	JONES FORK	HY	10	WAT	01/86	U	
WSCC/CA-SNV	CA	PG&E	MOKELUMNE IMPROVEMENTS	HY	3	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	OTHER DIV/STOR INCREASE	HY	0	WAT	01/86	P	
WSCC/CA-SNV	CA	PG&E	PROJ G 2 MOKELUMNE	HY	1	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	PROJ G 3 WEST PT UNIT 2	HY	7	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	PROJ G 4 SALT SPRINGS 3	HY	6	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	PROJ GI DOAKS PH PIONEER	HY	1	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	PROJ J CRESTA PH UNIT 3	HY	18	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	PROJ J PH CRESTA DAM	HY	0	WAT	01/86	T	
WSCC/CA-SNV	CA	PG&E	PROJ J PH ROCK CREEK DAM	HY	1	WAT	01/86	L	
WSCC/CA-SNV	CA	PG&E	PROJ J ROCK CREEK UNIT 3	HY	36	WAT	01/86	L	
WSCC/CA-SNV	CA	SMUD	SOLAR 2	SO	1	SUN	01/86	P	
WSCC/CA-SNV	CA	PG&E	TEN SECTION 2	CG	5	CRU	01/86	P	J
WSCC/CA-SNV	CA	MID	UNNAMED HYDRO #1	HY	2	WAT	01/86	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 20	GE	110	GST	03/86	L	
WSCC/CA-SNV	CA	CDWR	PALERMO	HY	1	WAT	03/86	T	
WSCC/CA-SNV	CA	CDWR	SOUTH GEYSERS	GE	55	GST	03/86	U	
WSCC/CA-SNV	CA	PG&E	BELDEN YELLOW CREEK	HY	0	WAT	05/86	L	
WSCC/CA-SNV	CA	GLEN	SCHOLL CANYON 2	IC	5	REF	06/86	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	1	WAT	06/86	P	
WSCC/CA-SNV	CA	CDWR	THERMALITO DIV. DAM	HY	3	WAT	06/86	L	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	9	WND	06/86	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	7	GST	07/86	P	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 1	ST	750	BIT	07/86	U	J
WSCC/CA-SNV	CA	SCE	LARGE COGENERATION	CG	75	UNK	07/86	P	
WSCC/CA-SNV	CA	CDWR	MOJAVE SIPHON 1	HY	7	WAT	07/86	U	
WSCC/CA-SNV	CA	PG&E	OID & SJID SAND BAR	HY	12	WAT	07/86	L	
WSCC/CA-SNV	CA	PG&E	OIL FIELD/REF COGEN	CG	100	CRU	07/86	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/86	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	13	SUN	07/86	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	25	WND	07/86	P	
WSCC/CA-SNV	CA	CDWR	HONEY LAKE HYBRID	CG	18	WD	12/86	P	
WSCC/CA-SNV	CA	CDWR	LAKE ISABELLA DAM	HY	8	WAT	12/86	L	
WSCC/CA-SNV	CA	SMUD	CALAVERAS	HY	100	WAT	01/87	P	
WSCC/CA-SNV	CA	SDGE	GEOTHERMAL 1	GE	37	GST	01/87	P	
WSCC/CA-SNV	CA	MID	KAISER CREEK	HY	0	WAT	01/87	P	
WSCC/CA-SNV	CA	NCPA	NF STANISLAUS R PROJ.	HY	100	WAT	01/87	T	
WSCC/CA-SNV	CA	SDGE	NILAND 2	GE	50	GST	01/87	P	
WSCC/CA-SNV	CA	PG&E	OTHER DIV/STOR INCREASE	HY	0	WAT	01/87	P	
WSCC/CA-SNV	CA	MID	RUSH CREEK	HY	0	WAT	01/87	P	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO BUCKS PROJ	HY	17	WAT	01/87	L	
WSCC/CA-SNV	CA	PG&E	SMALL HYDRO PROJ L	HY	14	WAT	01/87	P	
WSCC/CA-SNV	CA	PG&E	TEXACO	CG	233	PC	01/87	P	
WSCC/CA-SNV	CA	PG&E	WINDS FARMS	WM	12	WND	06/87	P	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 2	ST	750	BIT	07/87	U	J

Western Systems Coordinating Council
Unit Additions Planned for 1983-1992

Table 20

California-Southern Nevada Power Area

NPCC
MAPP
ECAR
MAAC
SPP
SERC
ERCOT
BRITISH COLUMBIA
ALBERTA
WASHINGTON
MONTANA
SOUTH DAKOTA
OREGON
IDAHO
WYOMING
NEVADA
UTAH
COLORADO
CALIFORNIA
ARIZONA
NEW MEXICO
TEXAS

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	SCE	LARGE COGENERATION	CG	75	UNK	07/87	P	
WSCC/CA-SNV	CA	PG&E	OIL FIELD/REF COGEN	CG	130	CRU	07/87	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/87	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	1	SUN	07/87	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	6	SUN	07/87	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	25	WND	07/87	P	
WSCC/CA-SNV	CA	SCE	FUEL CELL 1	FC	11	UNK	08/87	P	
WSCC/CA-SNV	CA	SCE	BALSAM MEADOW HYDRO	HY	200	WAT	01/88	P	
WSCC/CA-SNV	CA	MID	LAGRANGE HYDRO	HY	0	WAT	01/88	P	
WSCC/CA-SNV	CA	PG&E	OTHER DIV/STOR INCREASE	HY	0	WAT	01/88	P	
WSCC/CA-SNV	CA	SMUD	SOLAR 3	SO	2	SUN	01/88	P	
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED SMALL HYDRO	HY	10	WAT	01/88	P	
WSCC/CA-SNV	CA	SCE	DINKEY CREEK	HY	120	WAT	03/88	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 19	GE	55	GST	06/88	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 22	GE	110	GST	06/88	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	14	WND	06/88	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	50	GST	07/88	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	24	GST	07/88	P	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 3	ST	750	BIT	07/88	T	J
WSCC/CA-SNV	CA	SCE	LARGE COGENERATION	CG	75	UNK	07/88	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/88	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	100	SUN	07/88	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	25	WND	07/88	P	
WSCC/CA-SNV	CA	LDWP	N SRAWLEY 2	GE	44	ZZ	10/88	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 21	GE	110	GST	12/88	P	
WSCC/CA-SNV	CA	MID	CCPA #1	GE	24	GST	01/89	P	
WSCC/CA-SNV	CA	SNCL	CCPA #1	GE	16	GST	01/89	P	
WSCC/CA-SNV	CA	PG&E	OTHER DIV/STOR INCREASE	HY	0	WAT	01/89	P	
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED SMALL HYDRO	HY	5	WAT	01/89	P	
WSCC/CA-SNV	CA	SMUD	WILDHORSE STATE	GE	70	GST	01/89	P	
WSCC/CA-SNV	NV	NEVP	ALLEN 1	ST	500	BIT	05/89	P	J
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/89	P	
WSCC/CA-SNV	CA	PG&E	GENERIC COGENERATION	CG	25	UNK	06/89	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 23	GE	110	GST	06/89	P	
WSCC/CA-SNV	NV	LDWP	WHITE PINE 1	ST	750	BIT	06/89	P	J
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	12	WND	06/89	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	50	GST	07/89	P	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 4	ST	750	BIT	07/89	T	J
WSCC/CA-SNV	CA	SCE	LARGE COGENERATION	CG	75	UNK	07/89	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/89	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/89	P	
WSCC/CA-SNV	CA	SCE	FUEL CELLS 2	FC	22	UNK	08/89	P	
WSCC/CA-SNV	CA	MID	CCPA #2	GE	12	GST	01/90	P	
WSCC/CA-SNV	CA	SNCL	CCPA #2	GE	8	GST	01/90	P	
WSCC/CA-SNV	CA	SMUD	DUNLAVY	GE	35	GST	01/90	P	
WSCC/CA-SNV	CA	PG&E	HOT WATER GEOTHERMAL	GE	50	GST	01/90	P	
WSCC/CA-SNV	CA	MID	MID #1	GE	25	GST	01/90	P	
WSCC/CA-SNV	CA	PG&E	OTHER DIV/STOR INCREASE	HY	0	WAT	01/90	P	
WSCC/CA-SNV	CA	SMUD	SOLAR 4	SO	5	SUN	01/90	P	
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED MAJOR HYDRO	HY	50	WAT	01/90	P	

Western Systems Coordinating Council
Unit Additions Planned for 1983-1992

Table 20

NPCC
MAPP
MAIN
ECAR
MAAC
SPP
SERC
ERCOT
BRITISH COLUMBIA
ALBERTA
WASHINGTON
MONTANA
SOUTH DAKOTA
OREGON
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WYOMING
NEVADA
UTAH
COLORADO
CALIFORNIA
ARIZONA
NEW MEXICO
TEXAS

California-Southern Nevada Power Area

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED SMALL HYDRO	HY	4	WAT	01/90	P	
WSCC/CA-SNV	CA	MID	UNNAMED HYDRO #2	HY	40	WAT	01/90	P	
WSCC/CA-SNV	CA	LDWP	N BRAWLEY 3	GE	44	ZZ	04/90	P	
WSCC/CA-SNV	NV	NEVP	ALLEN 2	ST	500	BIT	05/90	P	J
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/90	P	
WSCC/CA-SNV	CA	PG&E	GENERIC COGENERATION	CG	25	UNK	06/90	P	
WSCC/CA-SNV	CA	LDWP	SMALL HYDRO DEV	HY	10	WAT	06/90	P	
WSCC/CA-SNV	NV	LDWP	WHITE PINE 2	ST	750	BIT	06/90	P	J
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	9	WND	06/90	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	50	GST	07/90	P	
WSCC/CA-SNV	CA	SCE	LARGE COGENERATION	CG	75	UNK	07/90	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/90	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	100	SUN	07/90	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/90	P	
WSCC/CA-SNV	CA	SCE	FUEL CELLS 3	FC	22	UNK	08/90	P	
WSCC/CA-SNV	CA	PG&E	HOT WATER GEOTHERMAL	GE	50	GST	01/91	P	
WSCC/CA-SNV	CA	PG&E	IRON MNTN.MINES 2	HY	1	WAT	01/91	L	
WSCC/CA-SNV	CA	PG&E	MAJOR DIV/STOR INCR. AC3	HY	0	WAT	01/91	L	
WSCC/CA-SNV	CA	SMUD	SOLAR 5	SO	6	SUN	01/91	P	
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED MAJOR HYDRO	HY	50	WAT	01/91	P	
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED SMALL HYDRO	HY	1	WAT	01/91	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/91	P	
WSCC/CA-SNV	CA	PG&E	GENERIC COGENERATION	CG	25	UNK	06/91	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 24	GE	110	GST	06/91	P	
WSCC/CA-SNV	CA	SCE	SMALL COGENERATION	CG	100	UNK	07/91	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/91	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/91	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	100	SUN	08/91	P	
WSCC/CA-SNV	CA	SDGE	BLYTHE DEV. 1	ZZ	125	UNK	01/92	P	
WSCC/CA-SNV	CA	SMUD	COMB. TURBINE 1A	GT	62	NG	01/92	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	50	ZZ	01/92	P	
WSCC/CA-SNV	CA	PG&E	HOT WATER GEOTHERMAL	GE	50	GST	01/92	P	
WSCC/CA-SNV	CA	PG&E	UNIDENTIFIED MAJOR HYDRO	HY	50	WAT	01/92	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/92	P	
WSCC/CA-SNV	CA	PG&E	GENERIC COGENERATION	CG	25	UNK	06/92	P	
WSCC/CA-SNV	CA	SCE	SMALL COGENERATION	CG	100	UNK	07/92	P	
WSCC/CA-SNV	CA	SCE	SMALL HYDRO	HY	10	WAT	07/92	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/92	P	

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ARIZONA
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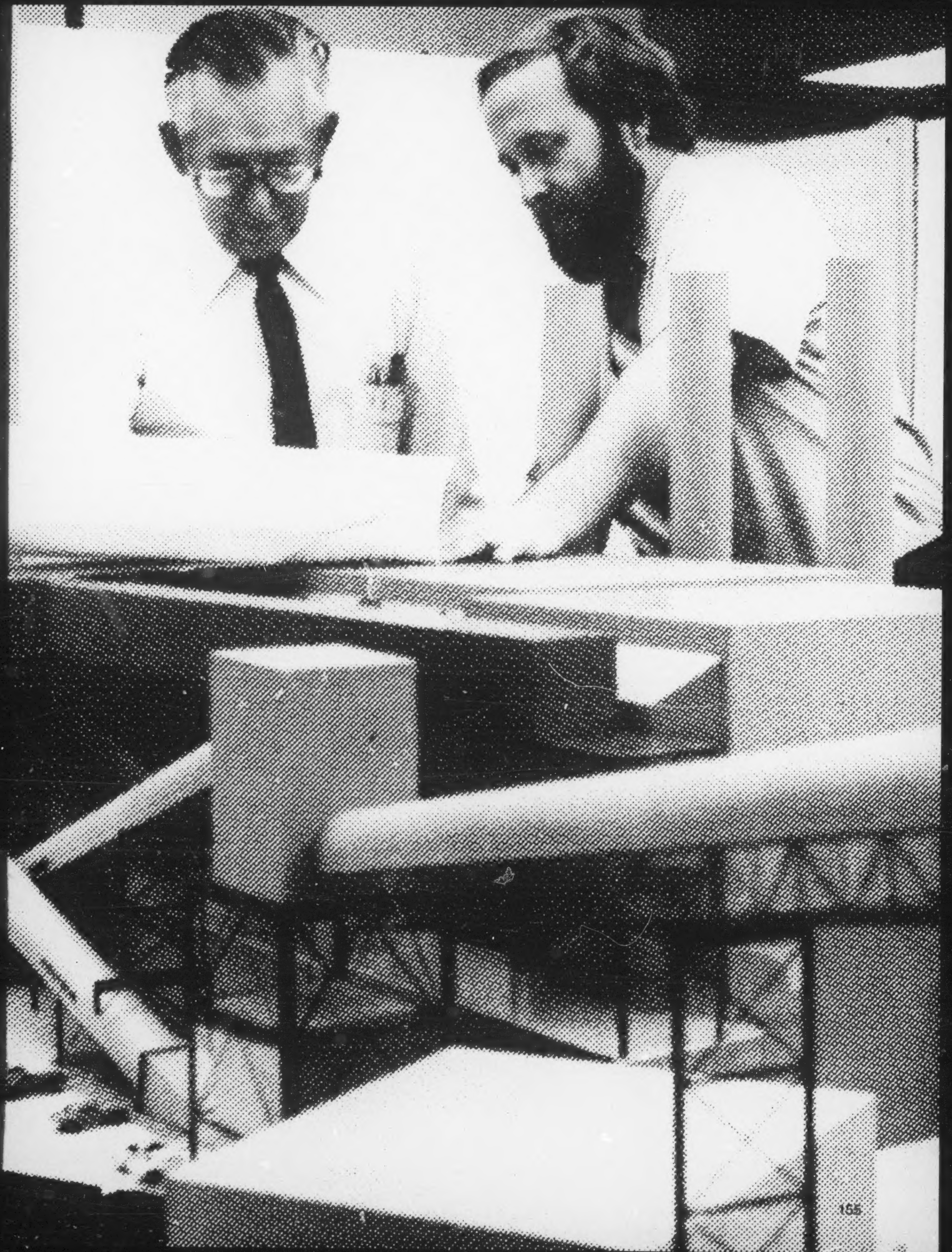
TEXAS

Western Systems Coordinating Council
Unit Additions Planned for 1983-1992

Table 20

California-Southern Nevada Power Area

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC-CAN.	AB	TAUC	KEEPHILLS 1	ST	377	SUB	05/83	V	
WSCC-CAN.	BC	BCHA	REVELSTROKE 1	HY	450	WAT	02/84	V	
WSCC-CAN.	BC	BCHA	REVELSTROKE 2	HY	450	WAT	03/84	V	
WSCC-CAN.	AB	TAUC	KEEPHILLS 2	ST	377	SUB	05/84	V	
WSCC-CAN.	BC	BCHA	REVELSTROKE 3	HY	450	WAT	06/84	V	
WSCC-CAN.	BC	BCHA	REVELSTROKE 4	HY	450	WAT	11/84	V	
WSCC-CAN.	AB	TAUC	SHEERNESS 1	ST	366	SUB	07/85	U	J
WSCC-CAN.	AB	TAUC	SHEERNESS 2	ST	366	SUB	07/86	U	J
WSCC-CAN.	BC	WKPL	BRILLIANT EXP (2)	HY	114	WAT	10/86	P	
WSCC-CAN.	AB	EDMP	GENESEE 2	ST	386	SUB	11/86	U	
WSCC-CAN.	AB	EDMP	GENESEE 1	ST	386	SUB	08/87	U	
WSCC-CAN.	BC	WKPL	WANETA EXP (2)	HY	105	WAT	10/87	P	
WSCC-CAN.	AB	TAUC	NEW STEAM 1	ST	360	SUB	10/88	P	J
WSCC-CAN.	AB	TAUC	NEW STEAM 2	ST	360	SUB	10/89	P	J
WSCC-CAN.	AB	TAUC	NEW STEAM 3	ST	360	SUB	10/90	P	J
WSCC-CAN.	BC	BCHA	PEACE C 1-2	HY	300	WAT	02/91	L	
WSCC-CAN.	BC	BCHA	PEACE C 3	HY	150	WAT	05/91	P	
WSCC-CAN.	BC	BCHA	PEACE C 4	HY	150	WAT	08/91	P	
WSCC-CAN.	AB	TAUC	NEW STEAM 4	ST	360	SUB	10/91	P	J
WSCC-CAN.	BC	BCHA	PEACE C 5	HY	150	WAT	11/91	P	
WSCC-CAN.	BC	BCHA	PEACE C 6	HY	150	WAT	02/92	P	
WSCC-CAN.	BC	BCHA	KENNLEYSIDE 1	HY	70	WAT	08/92	P	
WSCC-CAN.	AB	TAUC	SLAVE RIVER 1-3	HY	450	WAT	10/92	P	J
WSCC-CAN.	BC	BCHA	KEENLEYSIDE 2	HY	70	WAT	12/92	P	



Planned Additions of Generating Units

Coal Units

The coal-fired generating unit additions planned for 1983-1992 are presented for NERC in the following table. These units are listed as reported by the Regional Reliability Councils of NERC to the U.S. Department of Energy in their April 1, 1983 (EP-411) Reports.

The following table shows that in the years 1983-1992, U.S. utilities are planning to add 129 new coal-fired units, down from the 174 coal-fired units they were planning last year to add during the 1982-1991 period.

The codes and conventions used throughout this table are the same as described in the introduction to Table 20.

Coal-Fired Generating Units Scheduled for Service 1983-1992

(U.S.)

Construction Status	Number of Units	Total Summer MW Capability	Average Unit Size
Planned, But Not Utility Authorized	42 UNITS	18,733 MW	446 MW
Regulatory Approval Pending	13 UNITS	7,230 MW	556 MW
Regulatory Approval Received, But Not Under Construction	5 UNITS	2,565 MW	513 MW
Under Construction, Less Than 50% Complete	44 UNITS	26,130 MW	594 MW
Under Construction, More Than 50% Complete	25 UNITS	12,111 MW	484 MW
TOTAL	**129 UNITS**	**66,769 MW**	**518 MW**

Coal-Fired Generating Units Scheduled for Service 1983-1992

(Canada)

Construction Status	Number of Units	Total Summer MW Capability	Average Unit Size
Planned, But Not Utility Authorized	6 UNITS	2,000 MW	333 MW
Regulatory Approval Pending	0 UNITS	0 MW	—
Regulatory Approval Received, But Not Under Construction	0 UNITS	0 MW	—
Under Construction, Less Than 50% Complete	4 UNITS	1,504 MW	376 MW
Under Construction, More Than 50% Complete	4 UNITS	1,240 MW	310 MW
TOTAL	**14 UNITS**	**4,744 MW**	**339 MW**

North American Electric Reliability Council
Coal Unit Additions Planned for 1983-1992

Table 21

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAPP-U.S.	IA	MPW	MUSCATINE 9	ST	150	BIT	04/83	V	
WSCC-CAN.	AB	TAUC	KEEPHILLS 1	ST	377	SUB	05/83	V	
SPP/GRP A	LA	CAJN	BIG CAJUN 2, UNIT 3	ST	540	SUB	06/83	V	J
WSCC/NWPP	UT	UPLC	HUNTER 3	ST	400	BIT	06/83	V	
SPP/GRP C	KS	KAPL	JEFFREY 3	ST	680	SUB	06/83	V	J
ECAR	IN	NIPS	SCHAHFER 17	ST	344	COL	06/83	V	
SERC/FLA	FL	SECI	SEMINOLE 1	ST	600	BIT	06/83	V	
ECAR	MI	GHLP	UNIT 3	ST	58	COL	06/83	V	
ECAR	IN	HE	MEROM 1	ST	460	COL	07/83	V	
MAPP-CAN.	SA	SPC	POPLAR RIVER 1	ST	280	LIG	07/83	V	
WSCC/CA-SNV	NV	NEVP	REID GARNDER 4	ST	250	BIT	08/83	V	J
ERCOT	TX	TMPP	GIBBONS CREEK 1	ST	400	LIG	09/83	V	
SPP/GRP C	KS	SUNC	HOLCOMB 1	ST	280	COL	09/83	V	
MAPP-U.S.	IA	IIGE	LOUISA 1	ST	650	SUB	10/83	V	J
WSCC/NWPF	MT	MPC	COLSTRIP 3	ST	700	BIT	01/84	V	J
WSCC/RMPA	CO	CUEA	CRAIG 3	ST	400	BIT	01/84	V	
SERC/SOU	GA	GEPC	SCHERER 2	ST	808	BIT	02/84	V	J
WSCC/RMPA	CO	PRPA	RAWHIDE 1	ST	250	BIT	04/84	V	
MAAC	MD	BGE	BRANDON SHORES 1	ST	620	BIT	05/84	V	
SERC/VACAR	SC	SOCA	CROSS SITE UNIT 2	ST	450	BIT	05/84	V	
WSCC-CAN.	AB	TAUC	KEEPHILLS 2	ST	377	SUB	05/84	V	
MAPP-U.S.	ND	BEPC	ANTELOPE VALLEY 1	ST	416	LIG	06/84	V	
WSCC/AZ-NM	NM	PEGT	ESCALANTE 1	ST	210	BIT	06/84	V	
ECAR	MI	DECO	BELLE RIVER 1	ST	655	COL	07/84	V	J
ECAR	KY	BREC	WILSON 1	ST	395	COL	07/84	V	
NPCC/ONT	ON	ONHY	ATIKOKAN 1	ST	206	COL	10/84	V	
ECAR	KY	KU	GHENT 4	ST	500	COL	10/84	U	
MAIN/WUM	WI	WEP	PLEASANT PRAIRIE 2	ST	580	SUB	10/84	V	
SPP/GRP B	OK	OKGE	MUSKOGEE 6	ST	515	SUB	11/84	V	
NPCC/NY	NY	NEYE	SOMERSET	ST	625	BIT	11/84	U	
WSCC/NWPP	UT	DGT	BONANZA 1	ST	400	BIT	12/84	U	
SERC/FLA	FL	FLPC	CRYSTAL RIVER 5	ST	640	BIT	12/84	U	
ECAR	IN	AEP	ROCKPORT 1	ST	1300	COL	12/84	V	
ECAR	IN	SIGE	BROWN 2	ST	250	COL	01/85	U	
SPP/GRP A	AR	MSUI	INDEPENDENCE 2	ST	816	SUB	01/85	U	J
SERC/FLA	FL	SECI	SEMINOLE 2	ST	600	BIT	01/85	U	
SPP/GRP B	TX	SOEP	PIRKEY 1	ST	640	LIG	02/85	U	J
MAIN/WUM	WI	WPL	EDGEWATER 5	ST	380	SUB	03/85	U	J
SERC/FLA	FL	TAEC	BIG BEND 4	ST	419	BIT	04/85	U	
SERC/SOU	AL	ALAP	MILLER 2	ST	666	BIT	05/85	U	
WSCC/AZ-NM	AZ	TEP	SPRINGERVILLE 1	ST	350	SUB	06/85	U	
SPP/GRP B	TX	SWPS	TOLK 2	ST	508	SUB	06/85	U	
WSCC/NWPF	NV	SPP	VALMY 2	ST	250	BIT	06/85	U	J
ECAR	MI	DECO	BELLE RIVER 2	ST	655	COL	07/85	U	
WSCC/NWPF	MT	MPC	COLSTRIP 4	ST	700	BIT	07/85	U	J
WSCC-CAN.	AB	TAUC	SHEERNESS 1	ST	366	SUB	07/85	U	J
SPP/GRP B	OK	GRRD	GRDA 2	ST	520	BIT	01/86	U	
SPP/GRP B	LA	SOEP	DOLET HILLS 1	ST	640	LIG	02/86	U	
ERCOT	TX	HL&P	LIMESTONE 1	ST	720	LIG	03/86	U	
ECAR	IN	IP&L	PETERSBURG 4	ST	515	COL	04/86	U	

North American Electric Reliability Council
Coal Unit Additions Planned for 1983-1992

Table 21

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
MAPP-U.S.	MN	NSP	RIVERSIDE 7	ST	13	COL	05/86	P	
MAPP-U.S.	ND	BEPC	ANTELOPE VALLEY 2	ST	416	LIG	06/86	U	J
SPP/GRP C	MO	EMDE	ASBURY 2	ST	20	BIT	06/86	P	
ECAR	IN	NIPS	SCHAHFER 18	ST	344	COL	06/86	U	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 1	ST	750	BIT	07/86	U	J
WSCC-CAN.	AB	TAUC	SHEERNESS 2	ST	366	SUB	07/86	U	J
WSCC-CAN.	AB	EDMP	GENESEE 2	ST	386	SUB	11/86	U	
MAIN/WUM	WI	WPS	CO-GENERATION PLANT	ST	10	COL	12/86	P	
ERCOT	TX	WETU	OKLAUNION 1	ST	640*	COL	12/86	U	J
ECAR	IN	AEP	ROCKPORT 2	ST	1300	COL	12/86	U	
SERC/SOU	GA	GEPC	SCHERER 3	ST	808	BIT	02/87	U	J
SERC/FLA	FL	ORLA	STANTON 1	ST	415	BIT	02/87	L	J
ERCOT	TX	HL&P	LIMESTONE 2	ST	720	LIG	03/87	U	
SERC/FLA	FL	JACO	ST. JOHNS RIVER 1	ST	554	BIT	04/87	U	J
WSCC/AZ-NM	AZ	TEP	SPRINGERVILLE 2	ST	350	SUB	06/87	U	
ECAR	KY	LG&E	TIMBLE COUNTY 1	ST	495	COL	06/87	U	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 2	ST	750	BIT	07/87	U	J
WSCC-CAN.	AB	EDMP	GENESEE 1	ST	386	SUB	08/87	U	
MAPP-U.S.	MN	NSP	SHERBURNE CO. 3	ST	800	SUB	01/88	L	J
ERCOT	TX	TUCS	TWIN OAK 1	ST	562	LIG	02/88	U	
SERC/VACAR	SC	SOCA	CROSS SITE UNIT 1	ST	450	BIT	05/88	L	
SPP/GRP A	LA	CAJN	OXBOW 1	ST	540	LIG	05/88	L	
ERCOT	TX	LCRA	F.P.P. 3	ST	400	LIG	06/88	T	J
SPP/GRP C	MO	ASEC	UNDETERMINED	ST	630	BIT	06/88	P	
SERC/FLA	FL	TALL	UNKNOWN 1	ST	50	BIT	06/88	P	
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 3	ST	750	BIT	07/88	T	J
MAPP-U.S.	ND	OTP	SPIRITWOOD 1	ST	125	LIG	09/88	P	
WSCC-CAN.	AB	TAUC	NEW STEAM 1	ST	360	SUB	10/88	P	J
SERC/FLA	FL	JACO	ST. JOHNS RIVER 2	ST	554	BIT	10/88	U	J
MAAC	MD	BGE	BRANDON SHORES 2	ST	620	BIT	12/88	U	
ERCOT	TX	CP&L	COLETO CREEK 2	ST	640	COL	12/88	L	J
MAPP-U.S.	IA	IELP	GUTHRIE COUNTY 1	ST	650	COL	12/88	P	J
ERCOT	TX	TUCS	FOREST GROVE 1	ST	750	LIG	01/89	U	J
SERC/SOU	GA	GEPC	SCHERER 4	ST	808	BIT	02/89	U	J
ERCOT	TX	HL&P	MALAKOFF 1	ST	615	LIG	03/89	P	
ERCOT	TX	HL&P	MALAKOFF 2	ST	615	LIG	03/89	P	
WSCC/CA-SNV	NV	NEVP	ALLEN 1	ST	500	BIT	05/89	P	J
SERC/SOU	AL	ALAP	MILLER 3	ST	666	BIT	05/89	U	
WSCC/RMPA	CO	PSC	PAWNEE 2	ST	485	BIT	05/89	L	
ERCOT	TX	LCRA	F.P.P. 4	ST	400	LIG	06/89	P	
SERC/FLA	FL	SECI	TAYLOR 1	ST	600	BIT	06/89	L	
ERCOT	TX	TMPP	UNDETERMINED 1	ST	600	LIG	06/89	P	
WSCC/CA-SNV	NV	LDWP	WHITE PINE 1	ST	750	BIT	06/89	P	J
WSCC/CA-SNV	UT	LDWP	INTERMOUNTAIN 4	ST	750	BIT	07/89	T	J
WSCC-CAN.	AB	TAUC	NEW STEAM 2	ST	360	SUB	10/89	P	J
MAPP-CAN.	SA	SPC	FUTURE FOSSIL 1	ST	280	LIG	11/89	P	
WSCC/NWPP	WY	PPL	WYODAK 2	ST	315	BIT	12/89	T	J
WSCC/AZ-NM	AZ	AEPC	AEPCO 1	ST	275	SUB	01/90	P	J
ERCOT	TX	ST&M	SAN MIGUEL 2	ST	200	LIG	01/90	P	
SPP/GRP A	LA	MSUI	WILTON 1	ST	800	COL	01/90	P	

* 175 MW of 640 MW Oklaunion capacity to participants in SPP Region.

North American Electric Reliability Council
Coal Unit Additions Planned for 1983-1992

Table 21

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
ERCOT	TX	TP&L	TWIN OAK 2	ST	563	LIG	02/90	U	
ECAR	KY	CG&E	EAST BEND 1	ST	600	COL	04/90	U	
WSCC/CA-SNV	NV	NEVP	ALLEN 2	ST	500	BIT	05/90	P	J
NPCC/NY	NY	POAS	ARTHUR KILL	ST	700	BIT	05/90	P	
SPP/GRP C	MO	MIPU	UNKNOWN	ST	100	BIT	05/90	P	J
SPP/GRP B	TX	SWPS	SPS 6	ST	600	SUB	06/90	P	
WSCC/CA-SNV	NV	LDWP	WHITE PINE 2	ST	750	BIT	06/90	P	J
WSCC-CAN.	AB	TAUC	NEW STEAM 3	ST	360	SUB	10/90	P	J
MAPP-U.S.	ND	BEPC	ANTELOPE VALLEY 3	ST	500	LIG	11/90	L	J
MAPP-CAN.	SA	SPC	FUTURE FOSSIL 2	ST	280	LIG	12/90	P	
ERCOT	TX	CP&L	WALKER A 1	ST	640	LIG	12/90	P	J
ECAR	IN	SIGE	BROWN 3	ST	500	COL	01/91	P	
ERCOT	TX	TUCS	MARTIN LAKE 4	ST	750	LIG	01/91	U	
WSCC/AZ-NM	AZ	SRP	CORONADO 3	ST	350	SUB	05/91	U	
MAPP-U.S.	NE	NPPD	FOSSIL 3	ST	600	SUB	05/91	L	
SERC/SOU	AL	ALAP	MILLER 4	ST	666	BIT	05/91	U	
SERC/VACAR	SC	SOCA	PEE DEE UNIT 1	ST	450	BIT	05/91	L	
SERC/VACAR	SC	SOCG	UNDETERMINED	ST	500	COL	05/91	P	
WSCC/AZ-NM	TX	EPE	UNDETERMINED	ST	150	BIT	05/91	P	
WSCC/AZ-NM	AZ	APS	CHOLLA 5	ST	340	SUB	06/91	P	
WSCC/AZ-NM	AZ	TEP	SPRINGERVILLE 3	ST	350	SUB	06/91	T	
SERC/FLA	FL	SECI	TAYLOR 2	ST	600	BIT	06/91	L	
SPP/GRP C	MO	ASEC	UNDETERMINED	ST	630	BIT	06/91	P	
WSCC/NWPP	WA	WWPC	CRESTON 1	ST	500	SUB	07/91	L	
ECAR	**	APS	COAL 1	ST	630	COL	09/91	P	
WSCC/AZ-NM	NM	PEGT	ESCALANTE 2	ST	210	BIT	10/91	P	
WSCC-CAN.	AB	TAUC	NEW STEAM 4	ST	360	SUB	10/91	P	J
SPP/GRP B	OK	PSOK	INOLA 1	ST	640	SUB	12/91	P	J
WSCC/AZ-NM	AZ	AEPC	AEPCO 2	ST	275	BIT	01/92	P	J
ERCOT	TX	TUCS	UNDETERMINED	ST	650	COL	01/92	P	J
SPP/GRP A	LA	MSUI	WILTON 2	ST	800	COL	01/92	P	
SERC/VACAR	NC	CAPO	MAYO 2	ST	720	COL	03/92	U	
SERC/FLA	FL	TAEC	MACINNES 1	ST	425	BIT	04/92	P	
WSCC/RMPA	CO	PSC	UNSITED COAL 1	ST	350	BIT	04/92	P	
SERC/SOU	AL	ALEC	1 UNIT	ST	250	BIT	06/92	P	
SPP/GRP B	TX	SWPS	SWPS 7	ST	600	SUB	06/92	P	
SPP/GRP C	MO	EMDE	UNKNOWN	ST	150	COL	06/92	P	J
WSCC/RMPA	CO	CCS	NIXON 2	ST	350	BIT	10/92	P	
ECAR	IN	IP&L	PATRIOT 1	ST	650	COL	10/92	L	
ECAR	KY	EKPC	SMITH 1	ST	600	COL	10/92	U	
ERCOT	TX	CP&L	COAL 1	ST	640	COL	12/92	P	J
ERCOT	TX	LCRA	UNDETERMINED	ST	600	LIG	S*/92	P	
SPP/GRP B	OK	OKGE	UNKNOWN	ST	500	SUB	S*/92	P	

S*/ Undetermined summer month.

Planned Additions of Generating Units
Nuclear Units

The nuclear generating unit additions planned for 1983-1992 are presented for NERC in the following table. These units are listed as reported by the Regional Reliability Councils of NERC to the U.S. Department of Energy in their April 1, 1983 (EP-411) Reports.

The following table shows that in the years 1983-1992, U.S. utilities are planning to add 60 new nuclear units, only one less than they were planning last year to add during the 1982-1991 period.

The codes and conventions used throughout this table are the same as described in the introduction to Table 20.

Nuclear Generating Units Scheduled for Service 1983-1992
(U.S.)

Construction Status	Number of Units	Total Summer MW Capability	Average Unit Size
Planned, But Not Utility Authorized	0 UNITS	0 MW	—
Regulatory Approval Pending	1 UNIT	1,275 MW	1,275 MW
Regulatory Approval Received, But Not Under Construction	0 UNITS	0 MW	—
Under Construction, Less Than 50% Complete	10 UNITS	11,365 MW	1,136 MW
Under Construction, More Than 50% Complete	49 UNITS	52,716 MW	1,076 MW
TOTAL	**60 UNITS**	**65,356 MW**	**1,089 MW**

Nuclear Generating Units Scheduled for Service 1983-1992
(Canada)

Construction Status	Number of Units	Total Summer MW Capability	Average Unit Size
Planned, But Not Utility Authorized	0 UNITS	0 MW	—
Regulatory Approval Pending	0 UNITS	0 MW	—
Regulatory Approval Received, But Not Under Construction	0 UNITS	0 MW	—
Under Construction, Less Than 50% Complete	4 UNITS	3,524 MW	881 MW
Under Construction, More Than 50% Complete	9 UNITS	5,825 MW	647 MW
TOTAL	**13 UNITS**	**9,349 MW**	**719 MW**

North American Electric Reliability Council
Nuclear Unit Additions Planned for 1983-1992

Table 22

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
ECAR	OH	CG&E	ZIMMER 1	NB	792	UR	**/**	V	J
WSCC/CA-SNV	CA	SCE	SAN ONOFRE 2	NP	1100	UR	04/83	V	J
WSCC/CA-SNV	CA	PG&E	DIABLO CANYON 1	NP	1084	UR	05/83	V	
MAIN/CE	IL	CECO	LASALLE COUNTY 1	NB	1048	UR	05/83	V	
MAAC	PA	PPL	SUSQUEHANNA 1	NB	1050	UR	05/83	V	J
SERC/FLA	FL	FLPL	ST. LUCIE 2	NP	802	UR	06/83	V	J
NPCC/ONT	ON	ONHY	PICKERING 5	CD	516	UR	07/83	V	
WSCC/CA-SNV	CA	SCE	SAN ONOFRE 3	NP	1100	UR	09/83	V	J
NPCC/QUE	QB	HYQB	GENTILLY 2	CD	637	UR	10/83	V	
SERC/VACAR	SC	SOCG	SUMMER 1	NP	900	UR	10/83	V	J
WSCC/CA-SNV	CA	PG&E	DIABLO CANYON 2	NP	1106	UR	11/83	V	
ECAR	MI	DECO	ENRICO FERMI 2	NB	1093	UR	11/83	V	J
SPP/GRP A	MS	MSUI	GRAND GULF 1	NB	1250	UR	12/83	V	J
MAIN/CE	IL	CECO	LASALLE COUNTY 2	NB	1048	UR	12/83	V	
ECAR	MI	CP	MIDLAND 2	NP	786	UR	12/83	V	
NPCC/NY	NY	LOIL	SHOREHAM	NB	809	UR	01/84	V	
SPP/GRP A	LA	MSUI	WATERFORD 3	NP	1104	UR	01/84	V	
MAIN/CE	IL	CECO	BYRON 1	NP	1120	UR	02/84	V	
WSCC/AZ-NM	AZ	APS	PALO VERDE 1	NP	1270	UR	02/84	V	J
WSCC/NWPF	WA	BPA	WNP 2	NB	1100	UR	02/84	V	
SERC/VACAR	NC	DUPC	MCGUIRE 2	NP	1180	UR	03/84	V	
NPCC/ONT	ON	ONHY	BRUCE 6	CD	781	UR	04/84	V	
ECAR	OH	CAPC	PERRY 1	NB	1179	UR	05/84	V	J
ERCOT	TX	TUCS	COMANCHE PEAK 1	NP	1150	UR	06/84	V	J
ECAR	MI	CP	MIDLAND 1	NP	520	UR	07/84	V	
MAIN/SCILL	IL	IP	CLINTON 1	NB	950	UR	08/84	V	J
NPCC/ONT	ON	ONHY	PICKERING 6	CD	516	UR	10/84	V	
MAAC	PA	PPL	SUSQUEHANNA 2	NB	1050	UR	11/84	V	J
SERC/TVA	TN	TEVA	WATTS BAR 1	NP	1170	UR	11/84	V	
NPCC/NE	NH	PSNH	SEABROOK 1	NP	1150	UR	12/84	V	J
NPCC/ONT	ON	ONHY	BRUCE 5	CD	781	UR	01/85	V	
MAIN/E MO	MO	UES	CALLAWAY 1	NP	1120	UR	01/85	V	
WSCC/AZ-NM	AZ	APS	PALO VERDE 2	NP	1270	UR	02/85	V	J
NPCC/ONT	ON	ONHY	PICKERING 7	CD	516	UR	03/85	V	
MAAC	PA	PECO	LIMERICK 1	NB	1055	UR	04/85	V	
SPP/GRP C	KS	KAGE	WOLF CREEK 1	NP	1150	UR	04/85	V	J
SERC/VACAR	SC	DUPC	CATAWBA 1	NP	1145	UR	06/85	V	
MAIN/CE	IL	CECO	BYRON 2	NP	1120	UR	08/85	V	
NPCC/ONT	ON	ONHY	PICKERING 8	CD	516	UR	08/85	V	
MAIN/CE	IL	CECO	BRAIDWOOD 1	NP	1090	UR	10/85	V	
ERCOT	TX	TUCS	COMANCHE PEAK 2	NP	1150	UR	12/85	V	J
SPP/GRP A	LA	GUSU	RIVER BEND 1	NB	940	UR	12/85	V	J
SERC/TVA	TN	TEVA	WATTS BAR 2	NP	1170	UR	12/85	V	
SERC/VACAR	NC	CAPO	HARRIS 1	NP	900	UR	03/86	V	
ECAR	PA	CAPC	BEAVER VALLEY 2	NP	820	UR	05/86	V	J
NPCC/NE	CT	NOEU	MILLSTONE 3	NP	1150	UR	05/86	V	J
WSCC/AZ-NM	AZ	APS	PALO VERDE 3	NP	1270	UR	05/86	U	J
NPCC/ONT	ON	ONHY	BRUCE 7	CD	781	UR	07/86	V	
MAIN/CE	IL	CECO	BRAIDWOOD 2	NP	1090	UR	10/86	V	
SERC/TVA	AL	TEVA	BELLEFONTE 1	NP	1177	UR	11/86	V	

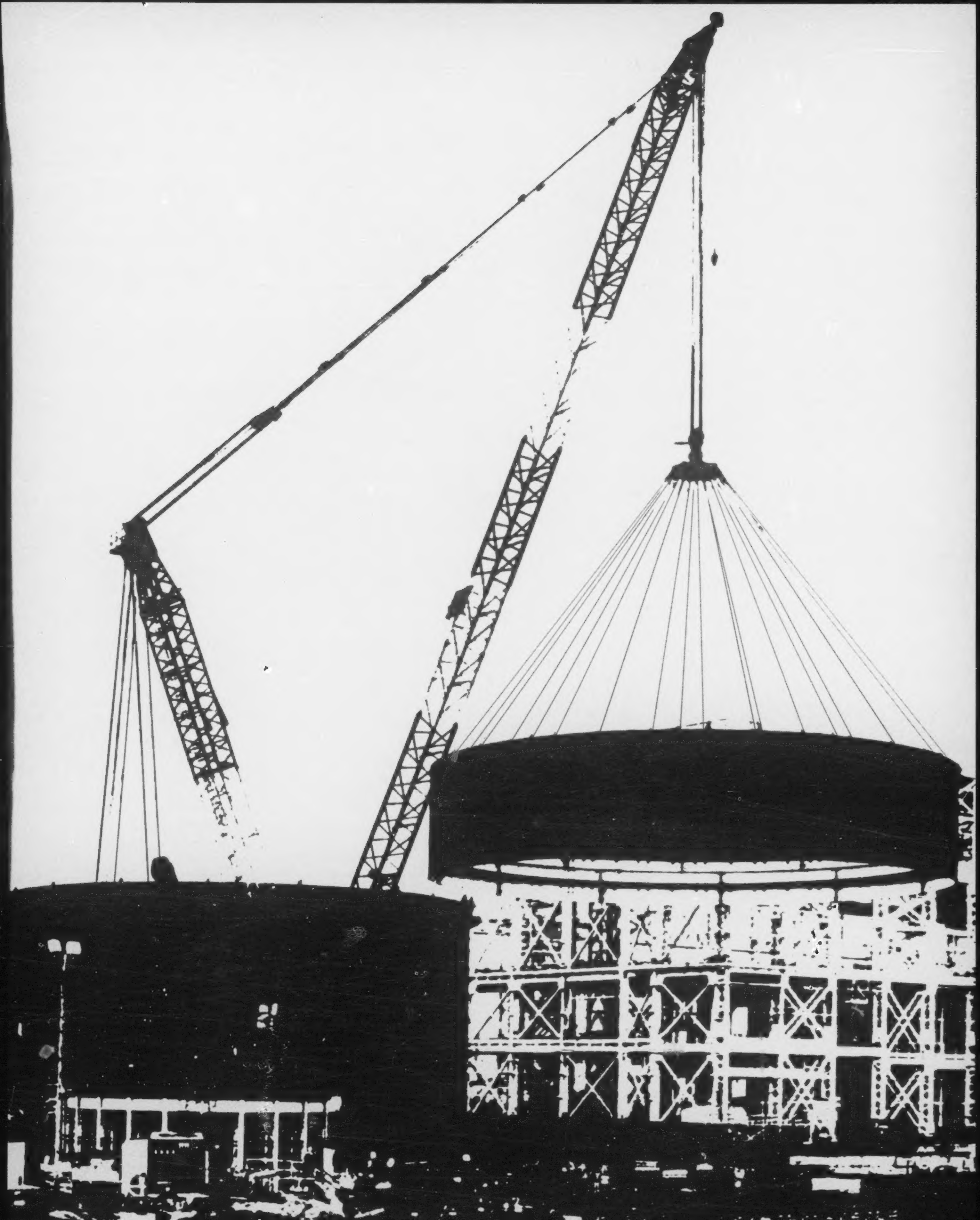
/ Date indeterminate: NRC suspension.

North American Electric Reliability Council
Nuclear Unit Additions Planned for 1983-1992

Table 22

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
NPCC/NY	NY	NIMP	NINE MILE POINT 2	NB	1080	UR	11/86	U	J
MAAC	NJ	PSEG	HOPE CREEK 1	NB	1067	UR	12/86	V	J
ECAR	IN	PSI	MARBLE HILL 1	NP	1130	UR	12/86	U	J
WSCC/NWPP	WA	BPA	WNP 3	NP	1240	UR	12/86	V	J
NPCC/ONT	ON	ONHY	BRUCE 8	CD	781	UR	01/87	V	
ERCOT	TX	HL&P	SOUTH TEXAS PROJECT 1	NP	1250	UR	02/87	V	J
SERC/SOU	GA	GEPC	VOGTLE 1	NP	1150*	UR	03/87	V	J
SERC/VACAR	SC	DUPC	CATAWBA 2	NP	1145	UR	06/87	V	
NPCC/NE	NH	PSNH	SEABROOK 2	NP	1150*	UR	07/87	U	J
SERC/TVA	AL	TEVA	BELLEFONTE 2	NP	1177	UR	11/87	V	
NPCC/ONT	ON	ONHY	DARLINGTON 2	CD	881	UR	05/88	U	
ECAR	OH	CAPC	PERRY 2	NB	1179	UR	05/88	V	J
ECAR	IN	PSI	MARBLE HILL 2	NP	1130	UR	06/88	U	J
SERC/SOU	GA	GEPC	VOGTLE 2	NP	1150	UR	09/88	U	J
MAAC	PA	PECO	LIMERICK 2	NB	1055	UR	10/88	U	
SPP/GRP A	MS	MSUI	GRAND GULF 2	NB	1250	UR	11/88	U	J
NPCC/ONT	ON	ONHY	DARLINGTON 1	CD	881	UR	02/89	U	
ERCOT	TX	HL&P	SOUTH TEXAS PROJECT 2	NP	1250	UR	02/89	U	J
SERC/VACAR	NC	CAPO	HARRIS 2	NP	900	UR	03/90	U	
WSCC/NWPP	WA	PSPL	SKAGIT 1	NB	1275	UR	01/91	L	
WSCC/NWPP	WA	BPA	WNP 1	NP	1250	UR	06/91	V	J
NPCC/ONT	ON	ONHY	DARLINGTON 3	CD	881	UR	11/91	U	
NPCC/ONT	ON	ONHY	DARLINGTON 4	CD	881	UR	08/92	U	

* 75 MW of 1150 MW Vogtle unit capacity to participant in Florida Subregion.



Planned Additions of Generating Units

Renewable Energy Sources

The planned additions of generating capability using renewable energy sources, other than hydro, for 1983-1992 are presented in the following table. These units are listed as reported by the Regional Reliability Councils of NERC to the U.S. Department of Energy in their April 1, 1983 (EP-411) Reports. The codes and conventions used throughout this table are the same as described in the introduction to Table 20.

The following data indicate that 3,015 MW or 89.1% of all planned additions of generating capability using renewable energy sources over the next ten years are located in the WSCC region. Of these planned additions, 2,953 MW or 87.3% of the NERC-U.S. total is located in the state of California.

Canada is not reporting any plans for additions of capability using renewable energy sources.

Generating Capability Using Renewable Energy Sources Scheduled for Service 1983-1992

Unit Type	Fuel Type	Number of Units	Total Summer MW Capability	Average Unit Size
Geothermal	Geothermal Steam	40 UNITS	1,952 MW	48.8 MW
Geothermal	Geothermal Hot Water	2 UNITS	88 MW	44.0 MW
Solar	Sun	15 UNITS	357 MW	23.8 MW
Wind Power	Wind	19 UNITS	273 MW	14.4 MW
Steam	Peat	1 UNIT	100 MW	100.0 MW
Cogeneration*	Biomass	6 UNITS	200 MW	33.3 MW
Cogeneration*	Wood and Wood Waste	2 UNITS	58 MW	29.0 MW
Steam	Wood and Wood Waste	4 UNITS	122 MW	30.5 MW
Steam	Refuse — Solid Waste	6 UNITS	188 MW	31.3 MW
Cogeneration*	Refuse — Solid Waste	1 UNIT	40 MW	40.0 MW
Internal Combustion	Refuse — Solid Waste	1 UNIT	5 MW	5.0 MW
	TOTAL	**97 UNITS**	**3,383 MW**	**34.9 MW**

***Does not include cogeneration capacity using conventional fossil fuel sources.**

North American Electric Reliability Council
Renewable Energy Source Unit Additions Planned for 1983-1992

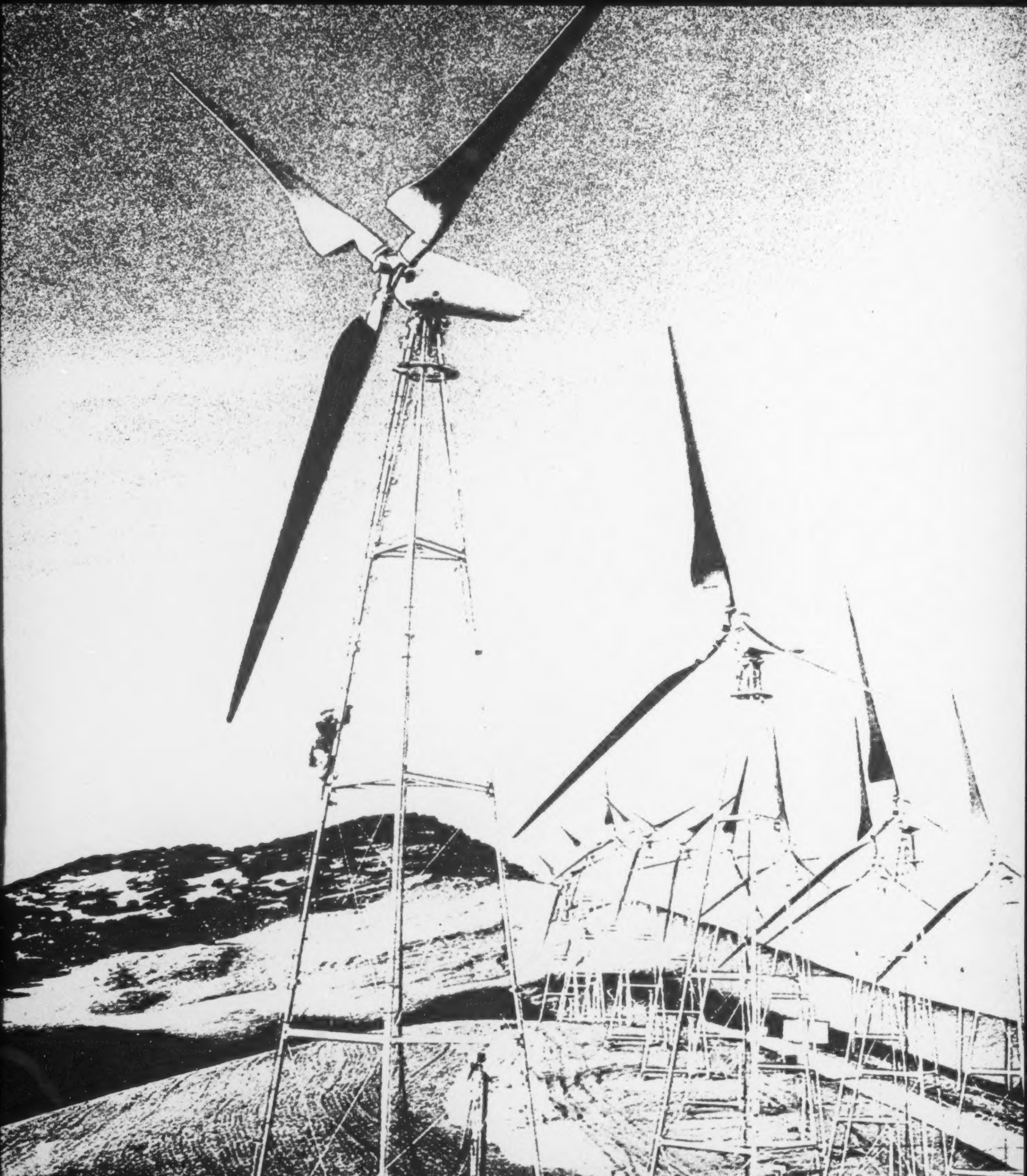
Table 23

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	PG&E	GEYSERS 18	GE	110	GST	05/83	V	
WSCC/CA-SNV	CA	PG&E	US WIND PWR	WM	4	WND	06/83	T	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	7	GST	07/83	V	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	1	SUN	07/83	V	
WSCC/CA-SNV	CA	SCE	WIND	WM	4	WND	07/83	V	
WSCC/NWPP	WA	WWPC	KETTLE FALLS	ST	42	WD	11/83	V	
NPCC/NY	NY	LOIL	MITCHEL GARDENS 1&2	ST	32	REF	11/83	U	
WSCC/CA-SNV	CA	SMUD	GEOTHERMAL 1	GE	72	GST	12/83	V	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	15	SUN	12/83	V	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	1	WND	12/83	L	
WSCC/CA-SNV	CA	SMUD	SOLAR 1	SO	1	SUN	01/84	L	
NPCC/NE	VT	VTGP	J. C. MCNEIL 1	ST	50	WOD	02/84	U	
WSCC/NWPP	UT	UPLC	MILFORD 1	GE	20	GST	04/84	U	
WSCC/CA-SNV	CA	CDWR	BOTTLE ROCK	GE	55	GST	06/84	U	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL 1	GE	5	GST	06/84	V	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL 2	GE	9	GST	06/84	V	
WSCC/CA-SNV	CA	PG&E	OXY GEOTHERMAL	GE	80	GST	06/84	U	
WSCC/CA-SNV	CA	PG&E	WILD WELL GEO. PROJ	GE	5	GST	06/84	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	5	WND	06/84	L	
WSCC/CA-SNV	CA	PG&E	WOOD WASTE	CG	40	ZZ	06/84	L	
WSCC/CA-SNV	CA	SCE	WIND	WM	7	WND	07/84	U	
WSCC/CA-SNV	CA	PG&E	BIOMASS CPL	CG	50	ZZ	10/84	T	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL 1	GE	47	GST	11/84	U	
NPCC/NE	VT	VTGP	RUTLAND SOLID WASTE	ST	4	REF	11/84	T	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	3	SUN	12/84	U	
WSCC/CA-SNV	CA	MID	MSR #1	GE	6	GST	01/85	P	
WSCC/CA-SNV	CA	SNCL	MSR #1	GE	4	GST	01/85	P	
WSCC/CA-SNV	CA	SDGE	NILAND 1	GE	24	GST	01/85	P	
MAAC	MD	BGE	N.E. WASTE	ST	47	REF	02/85	U	
NPCC/NY	NY	COEN	PEEKSKILL REFUSE	ST	50	REF	05/85	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 16	GE	110	GST	06/85	U	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	8	WND	06/85	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	25	GST	07/85	U	
WSCC/CA-SNV	CA	SCE	WIND	WM	33	WND	07/85	P	
WSCC/CA-SNV	CA	NCPA	GEOTHERMAL PROJ. 3	GE	105	GST	09/85	L	
WSCC/CA-SNV	CA	PG&E	SLD WSTE RECOVERY SF	CG	40	REF	10/85	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	3	SUN	12/85	U	
WSCC/CA-SNV	CA	SMUD	SOLAR 2	SO	1	SUN	01/86	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 20	GE	110	GST	03/86	L	
WSCC/CA-SNV	CA	CDWR	SOUTH GEYSERS	GE	55	GST	03/86	U	
WSCC/CA-SNV	CA	GLEN	SCHOLL CANYON 2	IC	5	REF	06/86	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	9	WND	06/86	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	7	GST	07/86	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	13	SUN	07/86	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	25	WND	07/86	P	
WSCC/CA-SNV	CA	CDWR	HONEY LAKE HYBRID	CG	18	WD	12/86	P	
WSCC/CA-SNV	CA	SDGE	GEOTHERMAL 1	GE	37	GST	01/87	P	
WSCC/CA-SNV	CA	SDGE	NILAND 2	GE	50	GST	01/87	P	
WSCC/CA-SNV	CA	PG&E	WINDS FARMS	WM	12	WND	06/87	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	1	SUN	07/87	P	

North American Electric Reliability Council
Renewable Energy Source Unit Additions Planned for 1983-1992

Table 23

REGION/ SUBREGION	STATE/ PROV.	UTILITY SYSTEM	UNIT NAME	UNIT TYPE	SUMMER MW CAPABILITY	FUEL TYPE	PROJECTED SERVICE DATE	CONSTRUCTION STATUS	JOINTLY OWNED
WSCC/CA-SNV	CA	SCE	SOLAR	SO	6	SUN	07/87	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	25	WND	07/87	P	
WSCC/CA-SNV	CA	SMUD	SOLAR 3	SO	2	SUN	01/88	P	
ERCOT	TX	CPSA	UNDETERMINED 1	ST	25	REF	02/88	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 19	GE	55	GST	06/88	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 22	GE	110	GST	06/88	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	14	WND	06/88	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	50	GST	07/88	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	24	GST	07/88	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	100	SUN	07/88	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	25	WND	07/88	P	
WSCC/CA-SNV	CA	LDWP	N SRAWLEY 2	GE	44	ZZ	10/88	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 21	GE	110	GST	12/88	P	
WSCC/CA-SNV	CA	MID	CCPA #1	GE	24	GST	01/89	P	
WSCC/CA-SNV	CA	SNCL	CCPA #1	GE	16	GST	01/89	P	
SERC/FLA	FL	SECI	PEAT 1	ST	100	PEA	01/89	P	
WSCC/CA-SNV	CA	SMUD	WILDHORSE STATE	GE	70	GST	01/89	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/89	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 23	GE	110	GST	06/89	P	
NPCC/NY	NY	POAS	PASNY WOOD	ST	20	WD	06/89	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	12	WND	06/89	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	50	GST	07/89	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/89	P	
WSCC/CA-SNV	CA	MID	CCPA #2	GE	12	GST	01/90	P	
WSCC/CA-SNV	CA	SNCL	CCPA #2	GE	8	GST	01/90	P	
WSCC/CA-SNV	CA	SMUD	DUNLAVY	GE	35	GST	01/90	P	
WSCC/CA-SNV	CA	PG&E	HOT WATER GEOTHERMAL	GE	50	GST	01/90	P	
WSCC/CA-SNV	CA	MID	MID #1	GE	25	GST	01/90	P	
WSCC/CA-SNV	CA	SMUD	SOLAR 4	SO	5	SUN	01/90	P	
WSCC/CA-SNV	CA	LDWP	N BRAWLEY 3	GE	44	ZZ	04/90	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/90	P	
NPCC/NY	NY	POAS	PASNY SOLID WASTE	ST	30	REF	06/90	P	
WSCC/CA-SNV	CA	PG&E	WIND FARMS	WM	9	WND	06/90	P	
WSCC/CA-SNV	CA	SCE	GEOTHERMAL	GE	50	GST	07/90	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	100	SUN	07/90	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/90	P	
MAIN/WUM	WI	WPS	WOOD PLANT	ST	10	WD	12/90	P	
WSCC/CA-SNV	CA	PG&E	HOT WATER GEOTHERMAL	GE	50	GST	01/91	P	
WSCC/CA-SNV	CA	SMUD	SOLAR 5	SO	6	SUN	01/91	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/91	P	
WSCC/CA-SNV	CA	PG&E	GEYSERS 24	GE	110	GST	06/91	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/91	P	
WSCC/CA-SNV	CA	SCE	SOLAR	SO	100	SUN	08/91	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	50	ZZ	01/92	P	
WSCC/CA-SNV	CA	PG&E	HOT WATER GEOTHERMAL	GE	50	GST	01/92	P	
WSCC/CA-SNV	CA	PG&E	GENERIC BIOMASS	CG	25	ZZ	06/92	P	
WSCC/CA-SNV	CA	SCE	WIND	WM	20	WND	07/92	P	
					3383 MW				



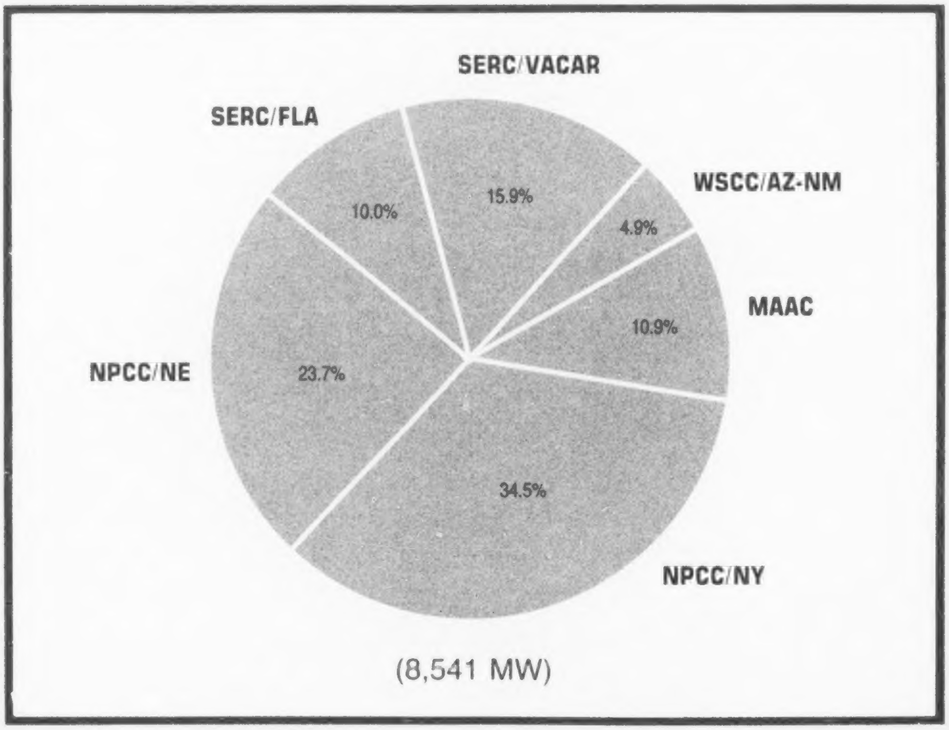
Planned Conversions of Units to Coal-Firing

Utilities are planning to convert 48 generating units to coal-firing over the next ten years. These planned conversions, as listed in the following table, represent a total of 8,610 MW in four NERC regions. With the single exception of one Canadian 69 MW gas-fired unit, all units listed are burning #6 fuel oil.

The data indicate that over one-third of all capacity planned for conversion is located in New York State alone. New England follows with almost one-quarter of the total. The NPCC region alone accounts for over half of total planned conversions because most of those units targeted for fuel change in this region were designed to burn coal originally. NPCC is showing 4,975 MW scheduled for conversion.

Canada is not reporting any plans for conversion of oil units to coal-firing.

NERC 1983-1992 Oil-to-Coal Conversions



North American Electric Reliability Council
Unit Conversions to Coal-Firing Planned for 1983-1992

Table 24

REGION SUBREGION	STATE PROV.	UTILITY SYSTEM	UNIT NAME	FORMER FUEL	SUMMER CAPABILITY BEFORE CONVERSION	REMOVAL DATE	RETURN DATE	SUMMER CAPABILITY AFTER CONVERSION
MAAC	DE	DPL	EDGE MOOR 3	F06	82	04/83	04/83	82
MAAC	MD	BGE	CRANE 2	F06	192	05/83	05/83	192
MAAC	MD	BGE	CRANE 1	F06	192	07/83	07/83	192
MAAC	NJ	PSEG	BURLINGTON 7	F06	180	11/86	11/86	175
MAAC	NJ	PSEG	BERGEN 2	F06	283	12/90	12/90	277
NPCC/NY	NY	COEN	RAVENSWOOD 3	F06	928	11/83	12/83	928
NPCC/NY	NY	ORRU	LOVETT 5	F06	202	08/84	10/84	196
NPCC/NY	NY	ORRU	LOVETT 4	F06	197	10/84	01/85	191
NPCC/NY	NY	COEN	ARTHUR KILL 3	F06	491	05/86	07/86	501
NPCC/NY	NY	COEN	ARTHUR KILL 2	F06	335	09/86	12/86	350
NPCC/NY	NY	CEHG	DANSKAMMER 3	F06	126	05/86	09/86	133
NPCC/NY	NY	LOIL	PORT JEFFERSON 3	F06	190	04/87	01/88	186
NPCC/NY	NY	CEHG	DANSKAMMER 4	F06	227	04/88	09/88	230
NPCC/NY	NY	ORRU	LOVETT 3	F06	63	10/88	01/89	63
NPCC/NY	NY	LOIL	PORT JEFFERSON 4	F06	190	04/88	01/89	186
NPCC/NE	MA	EUAS	SOMERSET 5	F06	74	N.A.	**/83	69
NPCC/NE	MA	EUAS	SOMERSET 6	F06	129	N.A.	**/83	114
NPCC/NE	NH	PSNH	SCHILLER 4	F06	48	N.A.	**/84	44
NPCC/NE	NH	PSNH	SCHILLER 5	F06	51	N.A.	**/84	47
NPCC/NE	NH	PSNH	SCHILLER 6	F06	52	N.A.	**/84	48
NPCC/NE	ME	CEMP	MASON 4	F06	35	N.A.	**/86	35
NPCC/NE	ME	CEMP	MASON 3	F06	36	N.A.	**/86	35
NPCC/NE	ME	CEMP	MASON 5	F06	36	N.A.	**/86	35
NPCC/NE	CT	UNIC	BRIDGEPORT HARBOR 3	F06	392	N.A.	**/84	250
NPCC/NE	MA	BOEC	MYSTIC 6	F06	144	N.A.	**/86	151
NPCC/NE	MA	BOEC	MYSTIC 4	F06	136	N.A.	**/87	142
NPCC/NE	MA	BOEC	MYSTIC 5	F06	135	N.A.	**/87	142
NPCC/NE	MA	BOEC	NEW BOSTON 1	F06	380	N.A.	**/87	332
NPCC/NE	MA	BOEC	NEW BOSTON 2	F06	380	N.A.	**/88	332
SERC/FLA	FL	FLPC	BARTOW 2	F06	117	03/85	08/85	113
SERC/FLA	FL	FLPC	BARTOW 3	F06	205	07/85	09/85	199
SERC/FLA	FL	TAEC	GANNON 1	F06	103	09/85	01/86	103
SERC/FLA	FL	TAEC	GANNON 2	F06	108	02/85	06/85	108
SERC/FLA	FL	TAEC	GANNON 3	F06	150	02/84	06/84	150
SERC/FLA	FL	TAEC	GANNON 4	F06	169	05/83	10/83	169
SERC/VACAR	VA	VIEP	CHESTERFIELD 3	F06	100	01/84	04/84	100
SERC/VACAR	VA	VIEP	YORKTOWN 1	F06	166	03/84	05/84	166
SERC/VACAR	VA	VIEP	YORKTOWN 2	F06	170	08/84	12/84	170
SERC/VACAR	VA	VIEP	PORTSMOUTH 1	F06	101	05/80[a]	01/85	101
SERC/VACAR	VA	VIEP	PORTSMOUTH 2	F06	101	10/80[a]	01/86	101
SERC/VACAR	VA	VIEP	POSSUM POINT 1	F06	74	10/80[a]	01/86	74
SERC/VACAR	VA	VIEP	POSSUM POINT 2	F06	69	10/80[a]	01/86	69
SERC/VACAR	SC	SOCG	WILLIAMS 1	F06	580	01/84	06/84	580
WSCC/AZ-NM	AZ	TEP	IRVINGTON 4	F06	156	10/84	05/85	108
WSCC/AZ-NM	AZ	TEP	IRVINGTON 3	F06	104	10/85	05/86	77
WSCC/AZ-NM	AZ	TEP	IRVINGTON 2	F06	81	10/86	05/87	41
WSCC/AZ-NM	AZ	TEP	IRVINGTON 1	F06	81	10/86	05/87	41
WSCC-CAN.	AB	TAUC	WABAMUN 1	NG	69	08/83	10/83	69
					8610MW			8197MW

a/ Reserve shutdown. N.A./ Date not available. **/ Month not available.

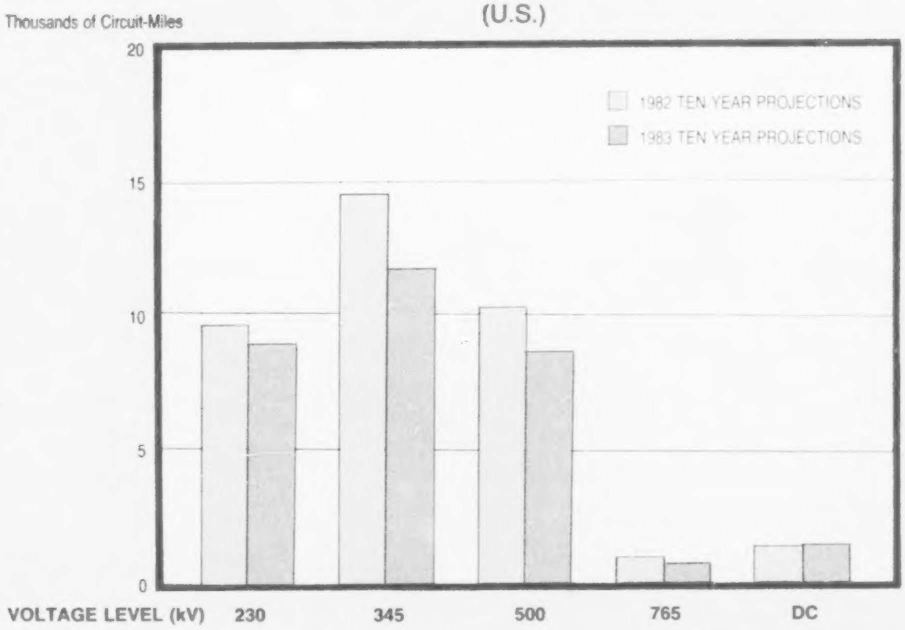
Planned Additions of Transmission Lines

The existing transmission networks in the United States and Canada together are comprised of over 163,000 miles of high voltage transmission lines. In the next ten years, utilities are planning to add a total of 39,600 circuit miles of new lines as delineated in the following tables. This compares to a total of 46,000 circuit miles projected last year, reflecting in part the reduction in projected generation additions.

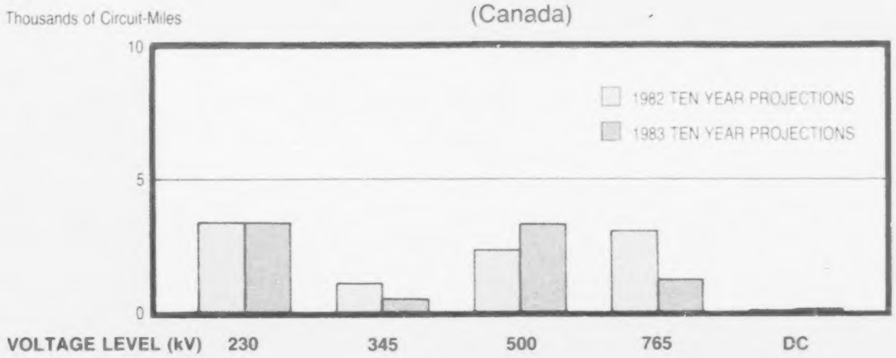
Of the tabulated voltage levels, the 345 kV level shows the largest projected increase in the U.S., with 11,608 circuit miles of lines planned to be added during the next ten years. In Canada, the largest increase in transmission miles is expected at the 230 kV level, with 3,427 circuit miles of lines planned to be added during the 1983-1992 period.

NERC Planned Transmission Line Additions

(U.S.)



(Canada)



Existing (1/1/83) (Circuit Miles)

Regional Table 25

REGION	VOLTAGE (kV) HVAC 230	345	500	765	HVDC[a] 500-600	800	900	1000
ECAR	998	11,423	796	1,536	0	0	0	0
ERCOT	0	5,405[b]	0	0	0	0	0	0
MAAC	4,580	170	1,570	0	0	0	0	0
MAIN	259	4,833	0	90	0	0	0	0
MAPP – U.S.	6,434	4,259	640	0	465	680	0	0
NPCC – U.S.	1,524	3,748	5	251	0	0	0	0
SERC	17,720	2	5,583	0	0	0	0	0
SPP	3,955	3,678	1,528	0	0	0	0	0
WSCC – U.S.	29,369	7,757[c]	9,120	0	0	844	0	0
NERC – U.S.	64,839	41,275	19,242	1,877	465	1,524	0	0
MAPP – CANADA	3,862	0	130	0	582	0	557	0
NPCC – CANADA	10,674	4,191	1,379	5,051	0	0	0	0
WSCC – CANADA	4,547	264[d]	3,021	0	0	0	0	0
NERC – CANADA	19,083	4,455	4,530	5,051	582	0	557	0

Existing (1/1/83) (Circuit Miles)

Subregional Table 25

	VOLTAGE (kV)							
	HVAC				HVDC [a]			
SUBREGION	230	345	500	765	500-600	800	900	1000
CMNWLTH ED.	0	2,294	0	90	0	0	0	0
EAST MISSOURI	89	899	0	0	0	0	0	0
SO. CENT. ILL.	47	754	0	0	0	0	0	0
WUM	123	896	0	0	0	0	0	0
MAIN	259	4,833	0	90	0	0	0	0
NEW YORK	1,080	2,142	5	251	0	0	0	0
NEW ENGLAND	444	1,606	0	0	0	0	0	0
NPCC – U.S.	1,524	3,748	5	251	0	0	0	0
NEW BRUNSWICK	324	359	0	0	0	0	0	0
ONTARIO	8,153	3	1,379	0	0	0	0	0
QUÉBEC	2,197	3,829[e]	0	5,051[f]	0	0	0	0
NPCC – CANADA	10,674	4,191	1,379	5,051	0	0	0	0
FLORIDA	3,940	0	516	0	0	0	0	0
SOUTHERN	5,843	0	1,204	0	0	0	0	0
TVA	30	2	2,224	0	0	0	0	0
VACAR	7,907	0	1,639	0	0	0	0	0
SERC	17,720	2	5,583	0	0	0	0	0
GROUP A	2,257	98	1,481	0	0	0	0	0
GROUP B	1,051	1,610	47	0	0	0	0	0
GROUP C	647	1,970	0	0	0	0	0	0
SPP	3,955	3,678	1,528	0	0	0	0	0
NWPP – U.S.	12,120	3,693	4,392	0	0	264	0	0
RMPA	3,579	540	0	0	0	0	0	0
AZ-NM	2,102	3,129	1,386	0	0	0	0	0
CA-SNV	11,568	395[c]	3,342	0	0	580	0	0
WSCC – U.S.	29,369	7,757	9,120	0	0	844	0	0

Under Construction, Committed or Planned (1983-87) (Circuit Miles)

Regional Table 26

VOLTAGE (kV)

REGION	HVAC 230	HVAC 345	HVAC 500	HVAC 765	HVDC[a] 500-600	HVDC[a] 800	HVDC[a] 900	HVDC[a] 1000
ECAR	95	706	128	551	0	0	0	0
ERCOT	0	1,668	0	0	0	155	0	0
MAAC	279	0	143	0	0	0	0	0
MAIN	0	262	0	0	0	0	0	0
MAPP – U.S.	179	749	0	0	0	0	0	0
NPCC – U.S.	0	668	0	0	59	0	0	0
SERC	2,202	0	1,561	0	0	0	0	0
SPP	763	1,291	640	0	0	0	0	0
WSCC – U.S.	1,886	1,960	2,046	0	0	-844	0	1,859
NERC – U.S.	5,404	7,304	4,518	551	59	-689	0	1,859
MAPP – CANADA	623	0	0	0	-582	0	0	582
NPCC – CANADA	531	331	450	1,123	0	0	46	0
WSCC – CANADA	801	0	756	0	0	0	0	0
NERC – CANADA	1,955	331	1,206	1,123	-582	0	46	582

continued

Under Construction, Committed or Planned (1983-87) (Circuit Miles)

Subregional Table 26

SUBREGION	HVAC 230	HVAC 345	HVAC 500	HVAC 765	HVDC [a] 500-600	HVDC [a] 800	HVDC [a] 900	HVDC [a] 1000
CMNWLTH ED.	0	161	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	47	0	0	0	0	0	0
WUM	0	54	0	0	0	0	0	0
MAIN	0	262	0	0	0	0	0	0
NEW YORK	0	480	0	0	0	0	0	0
NEW ENGLAND	0	188	0	0	59	0	0	0
NPCC – U.S.	0	668	0	0	59	0	0	0
NEW BRUNSWICK	0	275	0	0	0	0	0	0
ONTARIO	530	1	450	0	0	0	0	0
QUÉBEC	1	55[e]	0	1,123[f]	0	0	46	0
NPCC – CANADA	531	331	450	1,123	0	0	46	0
FLORIDA	628	0	683	0	0	0	0	0
SOUTHERN	626	0	532	0	0	0	0	0
TVA	0	0	149	0	0	0	0	0
VACAR	948	0	197	0	0	0	0	0
SERC	2,202	0	1,561	0	0	0	0	0
GROUP A	454	67	585	0	0	0	0	0
GROUP B	200	685	0	0	0	0	0	0
GROUP C	109	539	55	0	0	0	0	0
SPP	763	1,291	640	0	0	0	0	0
NWPP – U.S.	441	273	1,305	0	0	-264	0	264
RMPA	523	451	0	0	0	0	0	0
AZ-NM	240	1,236	234	0	0	0	0	0
CA-SNV	682	0	507	0	0	-580	0	1,595
WSCC – U.S.	1,886	1,960	2,046	0	0	-844	0	1,859

Under Construction, Committed or Planned (1988-92) (Circuit Miles)

Regional Table 27

VOLTAGE (kV)

REGION	HVAC 230	HVAC 345	HVAC 500	HVAC 765	HVDC [a] 500-600	HVDC [a] 800	HVDC [a] 900	HVDC [a] 1000
ECAR	28	730	199	261	0	0	0	0
ERCOT	0	1,618	0	0	0	0	0	0
MAAC	207	0	51	0	0	0	0	0
MAIN	0	197	0	0	0	0	0	0
MAPP – U.S.	350	632	610	0	0	0	0	0
NPCC – U.S.	0	205	0	0	0	0	0	0
SERC	1,101	0	878	0	0	0	0	0
SPP	882	335	66	0	0	0	0	0
WSCC – U.S.	882	537	2,197	0	0	0	0	240
NERC – U.S.	3,450	4,304	4,001	261	0	0	0	240
MAPP – CANADA	69	0	240	0	0	0	0	0
NPCC – CANADA	640	174	675	3	0	0	0	0
WSCC – CANADA	763	0	1,113	0	0	0	0	0
NERC – CANADA	1,472	174	2,028	3	0	0	0	0

Planned Transmission Line Additions

continued

Under Construction, Committed or Planned (1988-92) (Circuit Miles)

Subregional Table 27

	VOLTAGE (kV)							
	HVAC				HVDC[a]			
SUBREGION	230	345	500	765	500-600	800	900	1000
CMNWLTH ED.	0	0	0	0	0	0	0	0
EAST MISSOURI	0	0	0	0	0	0	0	0
SO. CENT. ILL.	0	125	0	0	0	0	0	0
WUM	0	72	0	0	0	0	0	0
MAIN	0	197	0	0	0	0	0	0
NEW YORK	0	89	0	0	0	0	0	0
NEW ENGLAND	0	116	0	0	0	0	0	0
NPCC – U.S.	0	205	0	0	0	0	0	0
NEW BRUNSWICK	0	90	0	0	0	0	0	0
ONTARIO	640	0	675	0	0	0	0	0
QUÉBEC	0	84[e]	0	3[f]	0	0	0	0
NPCC – CANADA	640	174	675	3	0	0	0	0
FLORIDA	114	0	511	0	0	0	0	0
SOUTHERN	532	0	145	0	0	0	0	0
TVA	0	0	53	0	0	0	0	0
VACAR	455	0	169	0	0	0	0	0
SERC	1,101	0	878	0	0	0	0	0
GROUP A	584	56	66	0	0	0	0	0
GROUP B	275	122	0	0	0	0	0	0
GROUP C	23	157	0	0	0	0	0	0
SPP	882	335	66	0	0	0	0	0
NWPP – U.S.	413	61	338	0	0	0	0	0
RMPA	139	425	0	0	0	0	0	0
AZ-NM	213	263	174	0	0	0	0	240
CA-SNV	117	-212[g]	1,685	0	0	0	0	0
WSCC – U.S.	882	537	2,197	0	0	0	0	240

Total: Existing, Under Construction, Committed or Planned (12/31/92) (Circuit Miles)

Regional Table 28

	VOLTAGE (kV)							
	HVAC				HVDC [a]			
REGION	230	345	500	765	500-600	800	900	1000
ECAR	1,121	12,859	1,123	2,348	0	0	0	0
ERCOT	0	8,691	0	0	0	155	0	0
MAAC	5,066	170	1,764	0	0	0	0	0
MAIN	259	5,292	0	90	0	0	0	0
MAPP - U.S.	6,963	5,690	1,250	0	465	680	0	0
NPCC - U.S.	1,524	4,621	5	251	59	0	0	0
SERC	21,023	2	8,022	0	0	0	0	0
SPP	5,600	5,304	2,234	0	0	0	0	0
WSCC - U.S.	32,137	10,254[c]	13,363	0	0	0	0	2,099
NERC - U.S.	73,693	52,883	27,761	2,689	524	835	0	2,099
MAPP - CANADA	4,554	0	370	0	0	0	557	582
NPCC - CANADA	11,845	4,696	2,504	6,177	0	0	46	0
WSCC - CANADA	6,111	264[d]	4,890	0	0	0	0	0
NERC - CANADA	22,510	4,960	7,764	6,177	0	0	603	582

Total: Existing, Under Construction, Committed or Planned (12/31/92) (Circuit Miles)

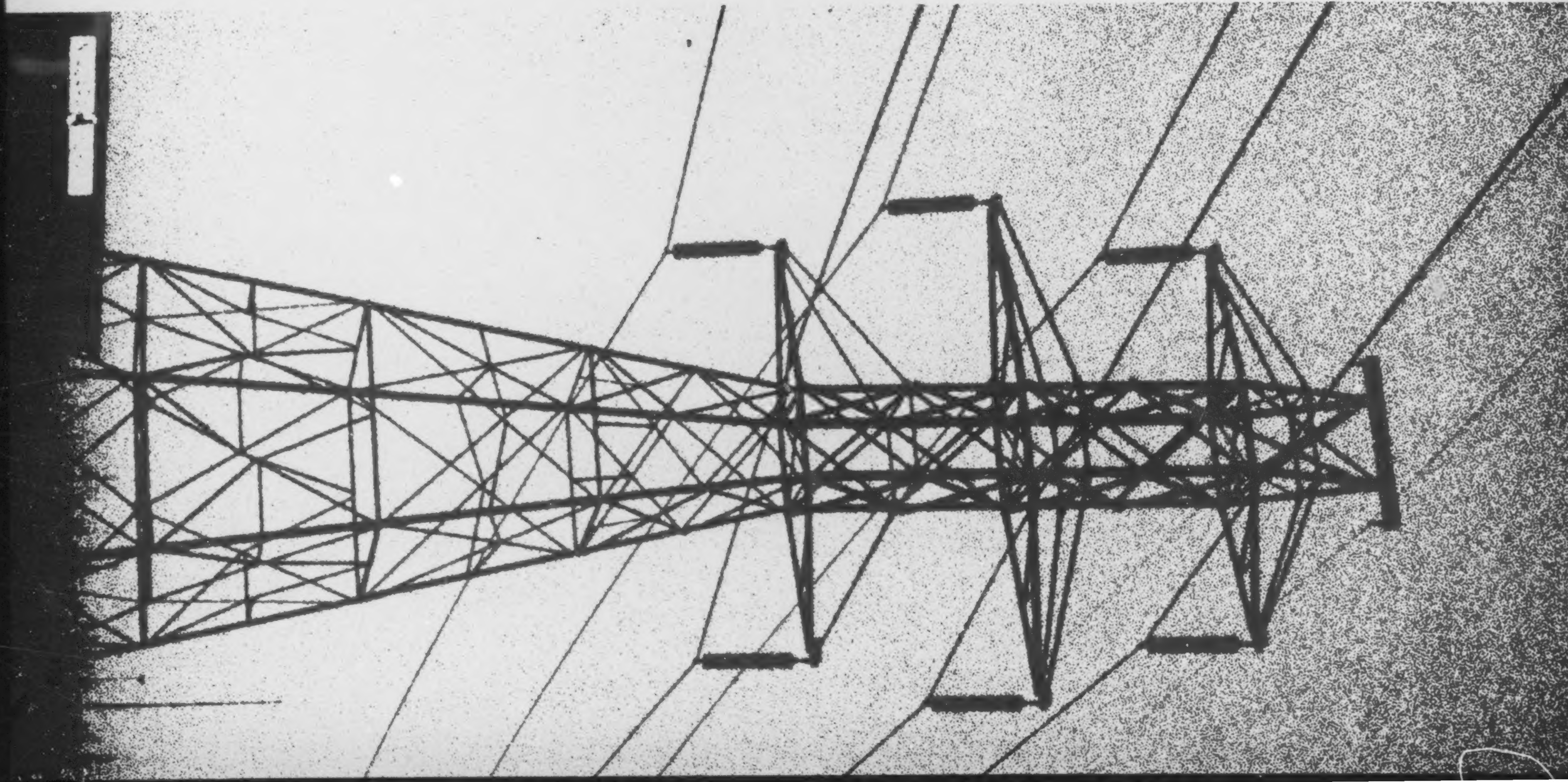
Subregional Table 28

VOLTAGE (kV)

SUBREGION	HVAC				HVDC [a]			
	230	345	500	765	500-600	800	900	1000
CMNWLTH ED.	0	2,455	0	90	0	0	0	0
EAST MISSOURI	89	889	0	0	0	0	0	0
SO. CENT. ILL.	47	926	0	0	0	0	0	0
WUM	123	1,022	0	0	0	0	0	0
MAIN	259	5,292	0	90	0	0	0	0
NEW YORK	1,080	2,711	5	251	0	0	0	0
NEW ENGLAND	444	1,910	0	0	59	0	0	0
NPCC – U.S.	1,524	4,621	5	251	59	0	0	0
NEW BRUNSWICK	324	724	0	0	0	0	0	0
ONTARIO	9,323	4	2,504	0	0	0	0	0
QUÉBEC	2,198	3,968[e]	0	6,177[f]	0	0	46	0
NPCC – CANADA	11,845	4,696	2,504	6,177	0	0	46	0
FLORIDA	4,682	0	1,710	0	0	0	0	0
SOUTHERN	7,001	0	1,881	0	0	0	0	0
TVA	30	2	2,426	0	0	0	0	0
VACAR	9,310	0	2,005	0	0	0	0	0
SERC	21,023	2	8,022	0	0	0	0	0
GROUP A	3,295	221	2,132	0	0	0	0	0
GROUP B	1,526	2,417	47	0	0	0	0	0
GROUP C	779	2,666	55	0	0	0	0	0
SPP	5,600	5,304	2,234	0	0	0	0	0
NWPP – U.S.	12,974	4,027	6,035	0	0	0	0	264
RMPA	4,241	1,416	0	0	0	0	0	0
AZ-NM	2,555	4,628	1,794	0	0	0	0	240
CA-SNV	12,367	183[c]	5,534	0	0	0	0	1,595
WSCC – U.S.	32,137	10,254	13,363	0	0	0	0	2,099

FOOTNOTES TO TABLES 25-28

a/ Reported as the sum of the plus and minus voltage magnitudes; i.e., ± 250 kVDC is reported as 500 kVDC.
b/ Category includes 76 miles operating at 138 kV.
c/ Category includes small amount of 287 kV.
d/ Category includes small amount of 360 kV.
e/ Category includes 315 kV.
f/ Category includes 735 kV.
g/ Consists of 162 miles of 287 kV being converted to 500 kV, 66 miles of 287 kV being converted to 230 kV, and the addition of 16 miles of 345 kV.



ERRATA

Electric Power Supply and Demand 1983-1992

Page 20: Set of bars labeled "MAPP" should be labeled "MAPP (CAN.)."

Page 154: Subregional heading should be "WSCC-Canada" rather than "California - Southern Nevada Power Area."

Pages 173 and 177: The 59 circuit miles of HVDC transmission reported for NPCC-U.S., and included in the NERC-U.S. total in the 500-600 kVDC category, should be shown in the 900 kVDC category.

The 155 circuit miles of HVDC transmission reported for ERCOT in the 800 kVDC category will be initially operated as a 400 kV single pole HVDC line.

Pages 174 and 178: The 59 circuit miles of HVDC transmission reported for New England, and included in the NPCC-U.S. total in the 500-600 kVDC category, should be shown in the 900 kVDC category.